

HOW NURSES BALANCE RISK WITH PATIENT AUTONOMY WHEN MAKING
DECISIONS ABOUT PHYSICAL RESTRAINT USE WITH OLDER PATIENTS IN
ACUTE CARE

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By

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ABSTRACT

The use of physical restraints to reduce falls within the older adult population in acute care hospital settings, are regarded as an integral part of risk management and prevention of patient harm (Bigwood & Crowe, 2008). Although literature indicates that nurses apply physical restraints to prevent injuries from a fall, there appears to be no robust evidence that links this intervention to injury prevention (Oliver, Healey, & Haines, 2010). Adding to this, decision-making around physical restraint use is a complex process and is influenced by different contextual factors (Dierckx de Casterle, Goethals, & Gastmans, 2015).

The purpose of this interpretive descriptive study was to further understand how nurses balance risk with patient autonomy when making decisions about physical restraint use for falls prevention, and to provide a deeper understanding of risk and patient autonomy that are applicable and meaningful to everyday nursing practice. Perceptions related to nurses' experience with balancing risk with patient autonomy were elicited through individual interviews with seven participants and one focus group session made up of five additional participants. The results of this research study provides insight into factors that influence the nurses' decision-making process about whether or not to apply physical restraints.

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CHAPTER ONE: INTRODUCTION

The release of the Institute of Medicine (IOM) report “Too err is human: building a safer health system” identified nursing as an essential part of providing quality and safe patient care (Kohn, Corrigan, & Donaldson, 2000). The ability to do so is determined by the degree to which nurses are situated within an environment that empowers them to make decisions about their patients’ plan of care and having the tools, resources, and support during their decision-making process (Armstrong & Laschinger, 2006). The IOM reported that failures at the systems level were noted to be the root cause in over 75% of adverse patient safety events (Kohn et al., 2000). The authors recommendation to create safety systems within healthcare organizations through the implementation of safe practices at the care delivery level, patient safety research from a nursing lens is required to continuously improve the quality and safe delivery of patient care (Armstrong & Laschinger, 2006).

Background

As the Leader of Patient Safety for my Health Authority, I am viewed and regarded as an external expert to all acute and residential inpatient programs, and therefore, regarded as part of the administrative leadership team. Thus, my interactions are mainly with middle to senior management, nurse leaders and educators, and less at the frontline level. Part of my role is managing an online patient safety-reporting system, in which patient safety reports are discussed at program quality and safety meetings, with the aim to consistently review and learn from, as well as support and implement changes to improve patient safety.

At previous meetings, I noticed that whenever I discussed patient safety concepts and how to support quality improvement initiatives, a theme of distress around physical restraint use for falls prevention was incredibly common across many nursing settings. It was most strongly voiced within acute elder care units, but also reported from intensive care, palliative care, and residential care units. There was a pattern of reporting where nurses felt torn between either applying physical restraints to promote patient safety, or promoting patient autonomy and risk taking, but with increased anxiety or guilt for not applying physical restraints, which appeared to increase if the patient ended up falling.

In light of recent evidence by Wong, Cummings, and Ducharme (2013) that describes an increase in stressful and complex work environments that is linked to adverse events, and alongside evidence of an increasing aging population and falls-related injuries (Public Health Agency of Canada, 2014), I believe the realities of what was expressed to me in these meetings required further examination, in order to generate new knowledge, and better understand the complex decision-making process on whether to apply, or not apply physical restraints for falls prevention.

Introduction to the Problem

The use of physical restraints to reduce falls within the older adult population in acute care hospital settings, are regarded as an integral part of risk management and prevention of patient harm, and an unavoidable part of caring for this population (Bigwood & Crowe, 2008). Although nurses play a key role in decision-making processes around applying physical restraints, both patient and staff factors determine the use of physical restraints. What appears to be happening now, as described by Goethals, Dierckx de Casterle, and Gastmans (2012) is that nurses appear to reason with themselves

with their final decision as a way to not only cope with their moral conflicts, but also appear to provide general reasons in applying physical restraints, with “safety” being the acceptable reason. Further, nurses’ attitudes, experiences, and knowledge regarding physical restraint use are important factors that affect their decision-making process (Goethals et al., 2012).

Despite literature that suggest that nurses apply physical restraints to prevent injuries from a fall, there appears to be no robust evidence to support this specific intervention linked to injury prevention (Mohler & Meyer, 2014; Oliver, Healey, & Haines, 2010). In fact, physical restraint use has been linked to patient falls, pressure ulcers, and negative psychological effects such as increased agitation and aggression, and event death (Goethals et al., 2012). Safe care may not be achieved despite the nurses’ best intentions, and more harm could occur if patient care is provided with an overarching treatment plan of using physical restraints (Dierckx de Casterle, Goethals, & Gastmans, 2015).

Although patient safety appears to be the end goal in choosing to apply physical restraints for falls prevention, restraint use also appears to pose safety risks for patients and staff (Riahi, Thomson, & Duxbury, 2016). The term “safety” appears to be subjective and based on reactive environmental factors such as time, shortage of staff, lack of support by others in choosing to not apply physical restraints, or outspoken opinions by family members or physicians (Dierckx de Casterle et al., 2015). Essentially, the decision-making process for physical restraint use is a complex process and is influenced by different contextual factors (Dierckx de Casterle et al., 2015).

When Janelli, Dickerson, and Ventura (1995) first examined the overuse of physical restraints and nurses' experiences with them, the authors reported that nurses felt that were engaged in a tug-of-war when caring for those who may require physical restraints. On one hand, nurses were aware of the negative consequences of applying restraints despite their best intentions to reduce risk and harm. On the other, their decisions appeared to be influenced by many contextual factors, and they were morally and ethically torn between what was the right thing to do and how to provide safe care, based on current policies and practice (Janelli, Dickerson, & Ventura, 1995).

According to Mohler and Meyer (2014) nurses are regularly confronted with situations in which the uses of physical restraints are required. Within the older adult population, the justifications for the decision to apply physical restraints are primary based on the perception of maintaining safe patient care. Essentially, nurses expect that the use of physical restraints will be effective in preventing falls or unsafe behaviors such as impulsive movements. Gallinagh et al. (2002) provides a profile to the types of patients who were physically restrained and found that 70% of the older adults were dependent on nursing care. Further, those who were restrained were more likely to receive medications such as opioids, diuretics, and anti-psychotics for treating delirium.

According to Goethals et al. (2012) some nurses view patient safety as managing and reducing unsafe acts, rather than embracing safe acts and learning about the environment that creates this. Interestingly, according to the Canadian Patient Safety Institute (CPSI, 2015) patient safety is defined as "the pursuit of the reduction and mitigation of unsafe acts within the healthcare system, as well as the use of best practices shown to lead to optimal patient outcomes." (p. 1). According to Goethals et al. (2012),

the use of physical restraints is presented as a way to control harmful behavior, unsafe acts, or risk taking. Nonetheless, the IOM report states, “safety is more than just the absence of errors” (p. 58): safety within healthcare recognizes the complex and dynamic nature of providing care and is a way to allow an environment to be safe, by understanding the processes of care and increase the reliability of patient care (Kohn, Corrigan, & Donaldson, 2000). With this in mind, it would be advantageous to understand if nurses do consider the use of physical restraints in falls prevention as a way to mitigate or reduce unsafe acts, and if applying physical restraints is deemed best practice.

When a nurse is faced with a potential safety hazard, a solid risk assessment is part of the decision-making process for determining which direction to take, in order to mitigate harm (Aven & Zio, 2011). In relation to applying physical restraints for preventing falls, taking risks appears to be based on a nurses’ comfort level and their willingness to do so. Further, a nurses’ risk assessment that contributes to the overall management of patient risk can be biased and reflect the values of the nurse and their institutional safety culture, rather than what may be best care for the patient (Mohler & Meyer, 2014). The decision-making process that contributes to risk management appears to be multi-faceted and heavily influenced by task-based and compliance-orientated policies, which allow very little room for flexibility or resilient decision-making environments (O’Keeffe, Tuckey, & Naweed, 2015).

Human factors are a resource used for examining how human and human performance occurs in complex environments (Dekker, 2005). It allows a deeper understanding to the features of the world in which people work and how certain factors

contribute to their decision-making processes. The essence of understanding human factors is allowing the ability to design a system that is error tolerant and error resistant (Dekker, 2005). For example, a resilient environment acknowledges that healthcare is a complex and dynamic environment; it embraces innovative thinking and strategies around safe decision-making. Further, decision-making that occurs within a resilient culture not only allows the management of uncertainty and risk, but also allows an increase in risk in order to generate opportunities for further safety development (Grote, 2015).

Although there does appear to be nurses who promote patient autonomy by allowing higher levels of risk, and who further acknowledge the importance of supporting independence for at-risk patients, they appear to be torn between institutional, moral and ethical factors (Janelli et al., 1995; Mohler & Meyer, 2014). Further, what appears to be a gap in the literature is how nurses have this conversation with the patient, family members, and other team members (Janelli et al., 1995; Mohler & Meyer, 2014).

Statement of the Problem

Despite the large investment in effort and financial resources invested in reducing preventable harm, rates of preventable harm in hospitals are continuing to increase. In particular, and according to Makary and Daniel (2016), patient safety incidents, or ‘medical errors’ are regarded as the third leading cause of death in the United States, and with an estimate mean rate of 250,000 per year dying from medical errors, behind cancer and heart disease. According to the Canadian Institute for Health Information (CIHI, 2016), between 2014 and 2015 approximately 138,000 patients who were hospitalized in Canada suffered from potentially preventable harm, at a rate of 1 out of 18

hospitalizations. A review of the current strategies implemented to improve patient safety reported a growing body of evidence that supports the effectiveness of interventions to reduce preventable harm (Shekelle et al., 2011). For example, safety interventions to reduce central line associated blood stream infections, pressure ulcers, and simulation exercise to improve patient safety are providing strong evidence for their implementation (Wachter, Pronovost, & Shekelle, 2013). Nevertheless, patient safety is more than simply adopting techniques from other organizations, such as aviation, and is more than improving safety culture. Rather, patient safety science requires the incorporation of practice, policy, training, and information technology, to form a deeper understanding of the complex world of keeping patients' safe (Shekelle et al., 2011).

Patient safety research requires a shift of study from working on multiple problems within patient safety, to working on common problems and using common theory methods (Shekelle et al., 2011). Senior leadership should be involved and supportive for innovative thinking from frontline clinicians, and provide the right policies, tools, and support that create dynamic environments for innovative thinking and design. It means going beyond a prescription or recipe of how to understand and measure patient safety and embracing the creative safety ideas that frontline hold (Shekelle et al., 2011). Lastly, the fundamentals of keeping patients safe will never change. Instead, what is required in the future are highly skilled, trained, and content experts within the field of patient safety to set a precedence for allowing innovation and creativity to provide high-quality evidence, well-designed interventions, and strong policies (Wachter, Pronovost, & Shekelle, 2013).

With an aging population and an increase in fall-related injuries, the number of falls-related admissions in Canada could reach a total number of 114,074 falls by 2036 (Oliver et al., 2010). Falls-related patient safety events within acute care facilities are not only associated with increased length of stay and higher discharge rates to extended care facilities (Oliver et al., 2007). Once admitted, falls account for 32% to 51% of reported patient safety events, with approximately 15% result in a serious head injury or fractures. Alongside the physical injuries associated with falls, psychological injuries such as fear of repeated falling, loss of confidence, and social isolation also impact their quality of life and health, which further increases the chance of another fall (Peel, 2011). According to CIHI (2018), more than 2 million reported ED visits in 2017 were due to injuries, 653,808 of which involved unintentional falls. Falls at home accounted for 114,383 reported ED visits, with the most common type of fall injury requiring hospitalization was hip fracture - 32,000 hospital stays (CIHI, 2018). Adding to this, older adults with dementia have a higher risk of falls and presenting to the ED (15%), compared to other older adults (9%) (CIHI, 2018).

As previously mentioned, Mohler and Meyer (2014) suggest that some nurses view patient safety in the context of fall prevention, as a way to control unsafe acts, rather than learning about the environment that creates this. The downside to this is that not only are the patient's voice and wishes potentially overlooked, but risk assessments are based on quick judgments and retrospective assessments, and with ethical and emotional conflicts weighing heavily into the final decision (Goethals et al., 2012).

The premise of patient autonomy is respecting one's right to hold views, make choices, and act on things that reflect their values and beliefs (Lindberg, Fagerstrom,

Sivberg, & Willman, 2014). Janelli et al. (1995) suggest that within the nursing discipline there appears to be a strong culture of applying physical restraints for safety sake or convenience, rather than in the interests of the patient's wishes. With this in mind, and the fact that there appears to be very little discussion on whether this culture still exists within the nursing discipline, it is advantageous to further understand if this value still rings true.

Purpose of the Study

The Public Health Agency of Canada (PHAC, 2014) report acknowledges that the complexity that surrounds falls' and the prevention of falls requires further exploration, and a deeper understanding on how to address this growing concern. Further, as the aging population increases, there must be focused efforts on falls prevention in order to maintain quality of life and wellbeing, and are able to continue to contribute to society, after an acute hospitalization.

There appears to be conflicting evidence on what nurses define as acts of patient safety with falls prevention, and yet, are somehow supposed to maintain patient autonomy, and allow a certain level of risk taking, despite national guidelines that push for falls prevention for all older adults (Goethals et al., 2012; Mohler & Meyer, 2014; PHAC, 2014). O'Keefe et al. (2015) added a new perspective to the balance of risk assessment in task performance and the influence of social factors. In particular, how nurses walk a tightrope between complying with safety rules, risk management and using reflection and re-assessment to guide action, especially in an environment where their own safety is at risk, as opposed to the patient's.

In light of this, the purpose of this study was to better understand how nurses balance risk and patient autonomy in the decision-making process for physical restraint use, in order to reduce the fall risk for older adult patients in acute care settings.

Significance of the Study

As stated earlier, an increase in fall-related physical injuries and psychological effects (e.g., fear of falling, social isolation) within the older adult population is a significant safety concern for health care professionals (Oliver et al. 2010; Peel, 2011). In some cases, nurses may feel responsible when physical or psychological injury occurs and they question their own decision-making surrounding the use of physical restraints. According to Seys et al. (2012), the second victim phenomenon occurs when “a health care provider [who is] involved in an unanticipated adverse patient event, medical error, and/or a patient related–injury ... [becomes] victimized in the sense that the provider is traumatized by the event” (p. 146). If we consider this phenomenon, imagine how detrimental the psychological and physical impact these patient safety events could have on the nursing population if not acknowledged and managed. Most second victims struggle in isolation and internalize many of their feelings. If these feelings and experiences are not shared, then we lose the ability to understand their decision-making processes and provide support for future decisions in healthcare (Seys et al., 2012).

Rowley and Waring (2011) provide a fairly critical view on the current patient safety research by suggesting that it fails to ask questions about the underlying nature of concerns and experiences. Further, what we currently know can come across as overly simplistic views of patient safety experiences, and glaze over the complexities of patient care. Instead, the authors propose that the patient safety movement within clinical

research requires the utilization of multiple theories and methodologies, from multiple healthcare lenses', which will allow a deeper understanding to the complex world of healthcare, and examine different experiences that may be overlooked within mainstream research (Rowley & Waring, 2011). By seeking a deeper understanding of how concepts such as physical restraints, risk, patient safety, resiliency, and second victim phenomenon interact and contribute to a nurses' decision-making process, we further show the realities of everyday nursing practice when faced with traumatic events, illuminate their experience, and generate knowledge that is relevant for future patient safety initiatives, which includes caring for the nurse.

CHAPTER TWO: LITERATURE REVIEW

The style of the following literature review was conducted in alignment with the philosophical underpinnings of interpretive description, that is to understand what is already known and not known, to understand gaps that may currently exist in the literature, and to further understand any variations or relationships to any of the concepts, with an intent to further understand the phenomenon of balancing patient autonomy and risk (Thorne, 2008). Relevant concepts will describe along with what is known or assumed to be known about them, what methods have been employed in order to find a deeper understanding about the problem, and what understandings these methods may have led, or could lead to future development (Thorne, 2008).

Patient Safety

According to the Canadian Patient Safety Institute (CPSI, 2015), patient safety is defined as "the pursuit of the reduction and mitigation of unsafe acts within the healthcare system, as well as the use of best practices shown to lead to optimal patient outcomes." (p. 1). A common indicator of patient safety is the rate of reported patient safety incidents among hospitalized patients (Baker et al., 2004). Baker et al. (2004) conducted the first known Canadian study to report on a national estimate of the incidence of patient safety incidents. The findings showed that approximately 7.5% of patients admitted to acute care hospitals within Canada experienced one or more patient safety incidents and that 36.9% of these were highly preventable. The study noted that most patients fully recovered, however these incidents contributed to a longer hospital admission or temporary disability. In 2007, the World Health Organization (WHO)

reported that one out of ten patients experience harm during their hospital admission (Ballangrud, Hedelin, & Hall-Lord, 2012).

According to the CPSI (2015), approximately 9,000 – 24,000 patients admitted to hospital die each year from preventable patient safety incidents. There are more deaths each year resulting from patient safety incidents, compared to the rate of deaths from breast cancer, motor vehicle accidents and HIV combined. For instance, according to a recent analysis by Makary and Daniel (2016), patient safety incidents, or ‘medical errors’ are the third leading cause of death in the United States, which is less than deaths from cancer and heart disease. In terms of the economic burden on acute care facilities in Canada, in 2009 – 2010 approximately \$379 million was associated with preventable patient safety incidents (Jackson, 2009).

A critical component to improving patient safety is the ability to create an environment that encourages the reporting of errors or incidents, evaluating its causes and implement appropriate actions to improve future safe care and performance (Kohn, Corrigan, & Donaldson, 2000). However, one of the largest barriers to a sustained culture of patient safety is the reluctance of staff to report an incident (Rowley & Waring, 2011). Although the focus of patient safety has shifted from a culture of blaming individuals, to one that focuses on preventing future errors by designing safety into the system, human error will always be an inevitable feature of organizational life, such as communication flows, team work arrangements, and the management of resources (Rowley & Waring, 2011).

Nevertheless, the creation of a safety culture within healthcare has been widely regarded as a pivotal step to the overall success of safety management (Kohn et al.,

2000). A culture of safety encompasses a shared value and belief of practices related to safety, mindfulness to anticipated risks, openness and trust in sharing of an experience, and a reflective and resilient attitude towards safety management. In addition, this philosophy does not mean that individuals are allowed to be careless. Rather, people are to remain vigilant and held responsible and accountable for their actions (Rowley & Waring, 2011). When an incident does occur, blaming the individual does nothing to make the system safer, nor does it prevent the same event from happening again. Essentially, the underpinning of patient safety is that learning and improving performance originates from enhanced communication and knowledge sharing (Kohn, Corrigan, & Donaldson, 2000).

The IOM report confidently stated that errors do not occur because of careless people, but rather from a system that sets people up for failure (Kohn, Corrigan, & Donaldson, 2000). Although the focus on designing better systems has been an important factor within the patient safety movement, there is also a need to further understand the importance of human behavior, performance, and responsibility within patient safety incidents (Kohn, Corrigan, & Donaldson, 2000). For example, it is estimated that on average, humans contribute up to 80 percent of reported incidents (Kohn, Corrigan, & Donaldson, 2000). In saying this, safety does not reside in a person or a device, but more from the interactions of components within a system. For instance, although leadership and an overall value for a culture of patient safety are important factors, safe environments also require the right equipment, skilled and knowledgeable teams, well-designed jobs, clear guidelines and policies, and a desired need to perform at their best (Kohn, Corrigan, & Donaldson, 2000). Designing safe systems means taking into account

-up to 80 percent- that organizational systems and culture play a compounding role to an overall culture of safety, with 20 percent representing how people's psychological limits, communication, and individual interaction plays out within their environment (Kohn, Corrigan, & Donaldson, 2000).

Definitions of Patient Safety Concepts

In 2005 (as cited by Runciman et al., 2009) the WHO developed the World Alliance for Patient Safety: an international classification and conceptual framework for patient safety. In that document, 'safety' is deemed as a reduction of risk and unnecessary harm to a level of accepted risk. The term 'patient safety incident' is "an event or circumstance that could have resulted, or did result in unnecessary harm to a patient" (p. 15). The word 'unnecessary,' recognized that errors, violations and deliberate unsafe acts of care occur within the healthcare system. Incidents are born from either unintended or intended acts of care.

An 'incident' can be classified as a reportable circumstance (such as a hazard), near miss, no harm incident, or harmful incident (adverse event). A 'near miss' is when an incident did not reach the patient as a result of a safety checklist and was not the result of chance. For example, part of a pre-operative checklist is to ask the patient if they have had anything to eat and drink in the last 12 hours. If the patient replies yes, their operation is canceled and rescheduled (Bliss et al., 2012). A 'no harm' incident is when an event reached the patient and with no discernable harm noted. A 'harmful or adverse event' is when an incident results in harm to a patient (Runciman et al., 2009).

Within the North American context, the Joint Commission has adopted a formal policy on Sentinel Events, which allows hospital to carefully investigate, analyze,

improve safety, and learn from serious adverse events (Joint Commission, 2015). This also included a formal taxonomy of the common terminology required for collecting and organizing patient safety data (Chang, Schyve, Croteau, O'Leary, & Loeb, 2005).

According to the Joint Commission (2016), a sentinel event is a patient safety event that reaches the patient and results in death, permanent harm, or severe temporary harm that required an intervention in order to sustain life. Further, a sentinel event can also be a patient safety event that had the risk of death or severe injury. In addition, a systematic procedure for alerting and responding to sentinel events should be implemented in accredited hospitals, which further encourages the active participation of health care leaders to learn and improve the quality of safe care from these events (Joint Commission, 2015).

Human Factors

Patient safety is influenced by a number of human factors and heuristics (Drach-Zahavy & Somech, 2010). Dr. James Reason introduced human factors engineering (HFE) to healthcare in the mid 1990's (Cafazzo et al., 2009). Originally, safety engineers were preoccupied with the safety of structural and transportation systems, and with a large proportion of evidence coming from aviation disciplines. Understanding how fundamental conceptual frameworks function between humans and complex technology provided a solid philosophy and methodology for safety science. Borrowed theories and methodologies from safety science, as well as a safety culture philosophy made sense to healthcare organizations looking for ways to improve patient care and safety (Cafazzo et al., 2009).

Reason (1995) reviewed HFE and its contributions to healthcare by introducing concepts of active and latent failures. Active failures are errors committed by the user of a system. For example, a nurse provides the wrong dose of medication to a patient. Latent failures are those created at an organizational level of the design, such as incomplete training of a least-restraint policy, and are failures that go unnoticed until they are triggered by a collection of local factors. Reason (1995) further emphasized the importance of team and organizational factors as contributing to the design of safety systems, and avoiding a culture of blame and shame. The author further stated that a culture of conducting routine root cause analysis of adverse events further enhances a safety culture. HFE also extends to non-technological systems, such as falls prevention promotion, as human behavior directs safety behavior and practice (Vincente, 1998).

Human factors analysis (HFA) in healthcare is used to develop understanding and broadening healthcare service providers' analysis of patient safety events, as well as to develop effective and sustainable safety initiatives, in order to mitigate risk in their chosen setting (Gosbee, 2004). For example, in order to generate rich descriptions on how patients in Canada manage their medications at home, Marck et al. (2010) combined interpretive description and HFE analysis to develop a research protocol. Marck et al. (2010) describe medication safety within the safety literature as a high-risk area for concern however, little is known about the supports and barriers present for medical management in the home setting.

According to Marck et al. (2010), the rationale for their study was to develop a deeper understanding of this phenomenon, share the experiences and nature of medication management of those in their own home, and further understand challenges

and risk-mitigating strategies. The aim was to show a rich narrative of the nature of medication management through visual images, which offered comprehensive understanding of the complexities of medication management. The unique combination of human factors principles and interpretive description allow a deep understanding of what is already known on general medication management in a hospital setting, and what is unknown in relation to the barriers and struggles of those managing in their own home. In addition, interpretive description allowed the researchers to view safety through a mixed approach lens, and share the realities of how complex and challenging medication safety is within a home setting, then compared to the hospital setting (Marck et al., 2010).

A common theme described by researchers who incorporate human factors analysis into their research, such as Marck et al (2010) and Karsh, Holden, Alper, and Or (2006) is that human factors analysis should be used in conjunction with understanding how the person and patient interact with their environment. For instance, Gosbee (2004) describes that human elements such as cognition, are affected by system factors, which include, lighting, sound, chaos, and even patient characteristics such as weight, lack of mobility, or availability of transporting equipment.

Nevertheless, although numerous studies have found that human factors contribute to the decision-making process (Gosbee, 2004; Karsh, Holden, Alper, & Or, 2006; Marck et al., 2010), there appears to be no specific nursing literature on how this relates to the decision-making process surrounding falls prevention, or physical restraint use. Therefore, the advantage of this research study was to understand how human factors are part of the decision-making process, especially with the decision on whether to apply physical restraints or not.

Human factors analysis allows a further understanding on how systems or processes are part of a decision-making process (Marck et al., 2010). With this in mind, this research study sought to further describe how human factors contribute to the use of physical restraint use for prevention of falls. This understanding may allow a nurse to understand safety from multiple worldviews, as opposed to one. In turn, the strength of discussing human factors and its part within the decision-making process for applying physical restraint use could provide further insight and reflection for nurses, which appears be lacking in description within the nursing literature.

Heuristics

A heuristic is a rule of thumb, a short cut, an intuitive judgment, or sometimes considered as common sense. They are simple and efficient rules, and explain how nurses make decisions and solve problems, especially in complex situations (Drach-Zahavy & Somech, 2010). Heuristics generally work well until they lead to systematic error and patient harm. If the care is delivered with no patient harm then those deviations from safety polices and guidelines can become part of normal practice (Drach-Zahavy & Somech, 2010). Although there is extensive work on mitigating and preventing harm by implementing safety policies and guidelines on best practice, and redesigning systems and processes to be less chaotic, the practice of patient safety has to be a conscious, everyday commitment at the individual level (Wilson, 2012). Despite organizational efforts to foster a culture of patient safety, nurses develop heuristics for when and how to follow policies and guidelines (Drach-Zahavy & Somech, 2010).

Drach-Zahavy and Somech (2010) sought to explore how nurses implement safety theories in relation to compliance with patient safety policies and procedures, and to find

reasons when a nurse may decide to follow safety policies, and when to take the risk and not comply with safety policies. The study was a multi-method approach involving ninety Israeli nurses within 15 units (internal medicine, geriatric and pediatric), and four diverse hospitals. Data collection involved semi-structured interviews, observations, and documentary evidence. Despite nurses being fully aware and knowledgeable of the risks associated with non-compliance of safety procedures, they developed five themes (heuristics) that appeared to have contributed to their decision on either following rules, or taking shortcuts. In the face of no harm events being reported, it allowed a perception of viewing these events as irrelevant to patient safety. One example could be running into a room and not complying with universal precautions, such as wearing an infection precaution gown over scrubs and gloving. The nurse weighed the pros and cons of deviating from safety policies in light of an acute situation, and caring for the patient as opposed to causing harm to them was the top priority (Drach-Zahavy & Somech, 2010).

In the above study, there was no mention of nurses discussing safety policies and guidelines set in place for protecting themselves against emotional stress caused by adverse events. There was strong evidence supporting the notion that ‘fear of being caught’ with non-compliance affected their clinical decision-making, which highlights organizational silence, which then leads into underreporting of safety events (Drach-Zahavy & Somech, 2010). Further it was interesting to note that the nurses in this study did not appear to understand the wider implications of their behavior on the safety of their patients.

The nursing literature, Cioffi (2001) suggests that heuristics within nursing are formulated from past experiences and skilled clinical knowledge that are incorporated in

decision-making strategies. According to Cioffi (2001), heuristics are “strategies used during the decision-making process to make inferences” (p. 592). Further, Heuristics appear during moments of uncertainty and are important factors that contribute to the decision-making process of nurses. They have also been described as a form of risk assessment or assessing the probability of something to occur, based on what may be presented in front of them, past experiences, and current knowledge base. O’Keeffe et al. (2015) builds on the notion that heuristics do have value with decision-making, as they appear to reduce the mental effort when numerous tasks are at hand. Further, heuristics appear to guide action when uncertainty or insufficient information is present.

Based on the notion that heuristics are developed from past experiences and appear to guide clinical decision-making, Cioffi (2001) sought to find new understanding by conducting an exploratory, descriptive study on nurses employed to acute care wards, on whether past experiences in making decisions during emergency situation are used, and how these past experiences contribute to their clinical decision-making. Cioffi (2001) reported that nurses did appear to use past experiences in making decisions around emergency situations, in which they contributed to the overall assessment and led to a final judgment of what to do. Further, nurse appear to have a particular mindset that was influenced by past experiences or instances, which contributed to their assumption on what may be presented in front of them. For instance, nurses were able to recognize a certain condition based on previous experience and based their memories to then cue their action. It was interesting to note that nurses appeared to be unaware of their heuristics and solely believed that their past experiences were valid forms of knowledge. Yet, there did not seem to be any awareness of what implications their actions may have

to the current situation in front of them (Cioffi, 2001). It made me wonder, are nurses aware that just because something worked previously, how do they not know if this strategy is an overestimation, or could cause more harm than good? Further, what are the consequences to heuristics when things do not go as planned? Nevertheless, what appears to be missing is how evidence-based practice or traditional clinical practice are performed when past experiences guide action, and could be an avenue for further research.

Prevalence and Impact of Falls in Acute Care

Older Adult Falls: Definitions. According to PHAC (2014), a senior refers to Canadians aged 65 years old and over. For the purposes of this research proposal, senior will be referred to as older adult (Statistics Canada, 2006). A fall is defined as “a sudden and unintentional change in position resulting in an individual landing at a lower level such as on an object, the floor, or the ground, with or without injury” (PHAC, 2014, p. 11).

According to the falls-related hospitalization and prevention initiatives study, approximately 53,545 Canadians aged 65 years and older are admitted to hospital as a result of a fall, with approximately 18% to 40% presenting to an emergency department (Peel, 2011). Once admitted, falls account for 32% to 51% of reported patient safety events, and approximately 15% result in a serious head injury or fractures. In Canada, it is estimated that up to 30% of seniors’ falls per year, which lead to injury-related hospitalizations (PHAC, 2014). Alongside the physical injuries associated with falls, psychological injuries such as fear of repeated falling, loss of confidence, depression, a feeling of helplessness, and social isolation also impact their quality of life and health, which further increases the chance of another fall (PHAC, 2014).

Interestingly, in 2011, approximately 5 million Canadians were aged 65 years or older, with this number expected to double in the next 25 years (PHAC, 2014). Falls-related patient safety events within acute care facilities are not only associated with increased length of stay and higher discharge rates to extended care facilities, but also increase the demand for health care resources (Oliver et al., 2007). Further, falls that result in no harm or minor harm can also have detrimental effects to the patient, and begin the process of a reduction in their functional reserve.

The impact of a patient falling while in hospital can also create guilt and distress amongst nurses and family members, who believe that the fall should have been prevented, in order to maintain constant patient safety. Blaming, complaints, and fear of litigation can increase stress and anxiety: the feeling that something should have been done overrules the notion that there is a constant balance of patient autonomy and risk assessment in light of rehabilitation goals (Oliver et al., 2007). Falls are usually the result of a combination of physical and underlying medical conditions, and should prompt the healthcare team to reassess what changes in the patient's functional and medical status caused the fall to occur (Oliver et al., 2007). From a human factors lens, the environment to where the patient fell should also be examined, in order to improve the system or falls management processes. For instance, environmental factors such as poor lighting, trip hazards, the use of physical restraints, and unsafe staffing levels contribute to falls (Oliver et al., 2007).

Oliver et al. (2010) suggest that the attitude, skills and availability of nursing can also contribute to a patient falling. However, the authors also mention that there is very little evidence that portrays a relationship between staffing attitudes and skill mix to fall

incidents, and if this was obtainable, the information may be counterintuitive due to complex interactions between staffing to patient ratios each shift and the dynamic nature of acute care environments.

Mohler and Meyer (2014) reviewed the literature by Oliver et al. (2010) and suggested that the authors fail to describe that when it comes to falls prevention and the decision to use physical restraints, factors such as staffing and case-load mix, organizational characteristics, and nurse's attitudes and beliefs towards using physical restraints, are powerful determinants of their use. This critique led Mohler and Meyer (2014) to conduct a systematic review of 31 studies related to nurses' attitudes towards physical restraint use for falls prevention.

The authors found that although nurses perceived the need for their use in order to provide safety, despite their negative feeling towards their use, nurses strongly felt that their implementation led to a reduction in the number of falls. Further, negative attitudes towards physical restraint use did not sway their decision to not apply them; the notion of controlling the patient's ability to fall and maintaining a certain level of safety justified their actions, and their levels of moral distress (Mohler & Meyer, 2014). In relation to inadequate staffing levels, the application of physical restraints for falls prevention was a reasonable decision and at times was supported by their institution. In the end, if we examine the literature presented, we see that safety issues overrule moral and ethical issues, despite a large amount of evidence that indicates physical restraints may not increase falls and fall-related injuries (Evans, Wood, & Lambert, 2003; Kopke et al., 2012; Mohler & Meyer, 2014).

Decision-Making and Patient Safety

Decision-making in nursing practice appears to a complicated process, and one that is never the same due to the dynamic nature of healthcare. Further, some situations are more complicated than others as they involve more uncertainties (Cioffi, 2001). In addition, decision-making process are dependent on heuristics and past experiences, as nurses compare a current situation to previously experienced ones, and then apply cognitive reasoning to their overall decision (Cioffi, 2001).

Rowley and Waring (2011) suggest that the current understanding of decision-making and patient safety offer contradictory views of clinical practice. On one hand, there are efforts to improve safe work practices at the upstream level of healthcare. At the same time, much attention has been put towards improving communication and checklists for easier decision-making processes. Yet, there appears to be a growing need for further attention to the hidden competencies that form the decision-making process in order to provide safe care. Drach-Zahavy and Somech's (2010) detail the gap between policy and practice and suggest that nurses' use of heuristic to form their decision-making provide reasonable data to their actions. Essentially, their decision-making process when not following rules does not occur in an ad hoc fashion, but is systematic and predictable.

According to Farrington (1993), heuristics are a quick way to reason with a decision when faced with uncertainty, and are often heavily relied on by nurses, especially when faced with situations in which no obvious answer is in front of them. Nurses apply what worked in the past to what is presented in front of them; skilled decision-making in times of uncertainty are then said to be based on skilled knowledge formulated from past experiences in the form of heuristics. Essentially, "nurses have

knowledge and experiences that can be incorporated in decision-making strategies, heuristics” (Cioffi, 2001, p.592). In light of this, understanding how nurses make decisions and encouraging conversation around strategies that promote the use of non-technical skills, such as awareness of one’s chaotic work environment, communication, team work, and leadership, provide greater opportunities for workers to exchange meaningful and relevant information, support dynamic risk assessment, and adjust practice based on their findings (Goethals et al., 2012).

What is already known amongst the nursing literature in relation to physical restraint use and the decision-making process is that nurses play a key role in determining whether they are applied or not (Goethals et al., 2012). These decisions appear to be difficult, complicated, and at times ethically driven. Further, the decision-making process is a thoughtful process that requires balancing of different social, contextual, and personal values (Chien, 1999; Karlsson, Bucht, Rasmussen, & Sandman, 2000; Lee, Cham, Tam, & Yeung, 1999; Ludwick, Meehan, Zeller, & O’Toole, 2008). However, little is known about the negative consequences of physical restraint use to patients that further complicate future decision-making processes for nurses. In the context of this research study, understanding the decision-making process with physical restraint use and in light of patient safety, was beneficial to further understand how other factors such as risk and uncertainty relate to their overall decision-making process. The benefit of finding new and meaningful knowledge does not only contribute to the nursing discipline, but it can also provide further dialogue for understanding the different factors that influence decision-making, and how best support nurses who may struggle with their decisions on a daily basis (Goethals et al., 2012).

Uncertainty and Decision-Making

Cranley et al. (2008) conducted a literature review to determine how nurses' clinical uncertainty has been conceptualized in the nursing literature. The authors noted that although the concept of uncertainty in decision-making has been well defined, much of the research has been conducted from a physicians' or patient's perspective, and with little evidence on how nurses experience, and act on uncertainty. According to Cranley et al. (2008) there is a theoretical gap within the nursing literature on how uncertainty is applied in practice, and if the nursing profession values patient safety, then they must further understand the characteristics of uncertainty in nursing decision-making. The goal of this would be to have the ability to proficiently recognize and address clinical uncertainty.

What stood out from this literature review was that the theoretical understanding of uncertainty in decision-making from a nursing perspective requires further analysis and research. For instance, Cranley et al. (2008) described that a number of nursing scholars describe uncertainty, but with no concrete theoretical description of the concept. As an example, uncertainty in decision-making has been described as a level of complexity in decision-making, a degree of confidence in decision-making, and decision variance across individuals (Brannon & Carson, 2003; Cioffi, 2000). However, a common thread amongst the nursing literature appears to be that nurses tend to rely on colleagues and their clinical experience to reduce uncertainty during decision-making processes (O'Connell, 2000).

For the purpose of this research study, the researcher sought to further understand how uncertainty contributes to a nurses' decision-making process when balancing risk

and patient autonomy. O'Connell (2000) mentioned that uncertainty has also been described in the nursing literature as “unknowing” in which nurses attempt to minimize. In light of this, if nurses are placed in a situation of unknowing, it would be interesting to learn what they experience, how they feel during these times, and what other factors allowed them to move from uncertainty and not knowing, to a state of knowing (O'Connell, 2000). Although this will not be the main focus of this research proposal, it will contribute to an overall understanding of the many factors that contribute to decision-making, and will shape questions asked of those who participate in the proposed study. Understanding uncertainty could allow the nurse to acknowledge that this concept does not reflect poor nursing, or lack of knowledge. Merely, it is a way to formulate questions and guide their decision-making process, instead of hindering it (Johnston & Fineout-Overholt, 2005). Further, understanding uncertainty could drive changes in quality improvement and the development of safe designs in patient care (Cranley et al., 2008).

Patient Safety through Risk Assessment

The aim of a risk assessment is the ability to identify unanticipated events that could create harm from a potential hazard, determine the probability of harm, and further consequences of not doing anything (Creedy, 2011). Risk assessments are completed by frontline as they describe the technical and human consequences to their daily activities (Glendon, Clarke, & McKenna, 2006). Risk management is when an organization strategically examines these risk assessments and establishes a framework to measure all risk components and impose control of risks (Glendon et al., 2006). By this definition, risk management is viewed as a static and linear process. Whereas risk assessment is

more fluid and dynamic, and accounts for the many factors that influence risk as either safe or unsafe.

When an individual is faced with a potential hazard, a solid risk assessment is part of the decision-making process for determining which direction to take, in order to mitigate harm (Aven & Zio, 2011). Further, risk assessment should acknowledge external factors that sway the final action, such as political or social factors. Essentially, risk assessment should focus on the system and how humans interact in their environment. Instead, what we see in acute hospital settings is a focus on unsafe behavior or unsafe safety acts from both the patient and nurses, with an aim to control these behaviors without fully understand the reason for them (O’Keeffe et al., 2015).

Resilience engineering. An aspect of risk assessment that needs to be considered is the concept of resilience engineering. Resilience engineering is a concept that describes a system’s ability to adjust its functioning before, during or after changes and disturbances, and its ability to perform under varying conditions (Hollnagel, 2014). A resilient system is focusing on what went right in a dynamic and complex system that led to safety practices, in order to understand and improve, as opposed to what went wrong and led to negative patient safety. Resiliency understands the nature of accidents rather than finds the cause, and examines patient safety events as not being due to noncompliance or violating rules (Hollnagel, 2014). In everyday nursing practice, we assess risk and safety as a linear process. For instance, we identify when something bad happens, we share awareness and understand what went wrong. O’Keeffe et al. (2015) argues against this current nursing philosophy of patient safety and risk, as it is incongruent with how risk truly manifests itself in healthcare.

Essentially, resilience contributes to decision-making in the following ways: it allows individuals at all levels in healthcare to anticipate paths that could lead to failure, cope when failure occurs, and recover when unexpected outcomes occur, but also thrive in learning from patient safety incidents, in order to provide safer solutions if the event ever arises (Woods, 2003). To some nurses, this might be the epitome of what critical thinking should be, however, decision-making in a resilient culture accepts that gaps may occur within healthcare, and although care will recover and continue after an unanticipated outcome, it strives to understand what factors may inhibit future acts of safe care (Fairbanks et al., 2014).

There is a dearth of evidence that describes decision-making processes in a resilient environment, which in turn, allow nurses to enhance their risk assessments by considering the wider socio-cultural environment. For example, nurses within this culture make decisions about the urgency of certain action, the consequences of the action, and their ability to continue through their routine with no setbacks (O’Keeffe et al., 2015). Each situation is assessed as unique, and although past experiences or heuristics may contribute to the final decision, it does not appear to pull or skew their decision-making process.

Nevertheless, there also appears to be very little evidence amongst the nursing literature on how resilience can be a contributing factor to the decision-making process, specific to physical restraint use. Goethals et al. (2012) briefly mentioned how organizational factors can have an impact to the decision-making process, however the concept of resiliency is not described. Organizational culture as stated by Hartnell, Yi Ou, and Kinicki (2011) is an “important social characteristic that influences organizational,

group, and individual behavior” (p. 667).) When organizational culture is used in the context of health care, it is used to identify informal concepts, attitudes and values of a workforce. It also refers to the larger and values-based and driven organizational practices imposed by senior leaders, which holds the workforce together, especially during times of small and large-scale system change (Feng, Bobay and Weiss, 2008).

Nevertheless, the literature on organizational culture on patient safety appears to focus on the barriers for implementing top-down safety initiatives and knowledge translation (Rowley & Waring, 2011). What appear to be unknown within the literature are the socio-cultural contexts of organizational culture to patient safety (Rowley & Waring, 2011). For instance, if patient safety is viewed as a complex and dynamic domain, then the socio-cultural issues central to patient safety require further understanding, and should be examined utilizing unorthodox methodologies and theories that illuminate the complexity of patient safety (Rowley & Waring, 2011). Essentially, the fundamental issues that shape patient safety require critical insight and examination through use of social science and interpretation of patient safety from other healthcare disciplines, rather than following the status quo and examine barriers to safety interventions or policies. This added information could provide richer meaning to organizations that have deemed patient safety a priority, and provide further insight and critical appreciation of patient safety (Rowley & Waring, 2011).

The Impact of Patient Safety Incidents on Nurses

If nurses appear to apply heuristics to their practice that are based on previous encounters and experience, then one must wonder how much of a negative impact previous patient safety incidents’ have on nurses. Cioffi (2001) stated the following study

participants' response to past experiences with patient care: "you remember past experiences of similar patients with similar conditions" (p. 594). Although Cioffi's (2001) study attempted to further understand past experiences with decision-making, there appears to be no mention on how negative past experiences shape heuristics, and the impact to nurses' work-life and personal life. As Cioffi (2001) suggests, if past experiences are essential to developing heuristic strategies for clinical decision-making, and recognizing critical moments, what happens to a nurse when they think back to an unpleasant experience, for instance, applying physical restraints due to a lack of staffing and monitoring a falls-risk patient, and how does that then contribute to their current decision-making process?

If we think back to Reason's (1995) description on how failures in patient safety occur, active failures can also be described as the "sharp end" in which the patient is affected. However, what most people don't realize is that healthcare professionals are often affected at the sharp end, yet it goes without acknowledgement, and for this, they suffer (Seys et al., 2012). The term to best describe this is known as the 'second victim' phenomenon, which is best described by Seys et al. (2012) as the following: "A health care provider involved in an unanticipated adverse patient event, medical error, and/or a patient related-injury who become victimized in the sense that the provider is traumatized by the event" (p. 146). When an incident occurs, second victims feel personally responsible for the unanticipated outcome and have the overall sense of failure for not protecting their patients. Further, they then second-guess their personal knowledge and skill level (Seys et al., 2012).

The "sickening feeling" of making a mistake appears to last with healthcare

professionals, in which they replay the event, agonize over what they should have done instead, or why they chose to make certain decisions, and question their future abilities to practice safely. Further, if they do not report the incident because they worry of potential punishment, they appear to then feel singled out and exposed, which further antagonizes their concerns for future practice (Seys et al., 2012). The prevalence of second victims ranges from 10.4% to 46%, with over half of all healthcare providers experiencing the impact of a patient safety incident at some point in their careers.

Most second victims struggle by themselves and internalize their emotions that often include, guilt of harming patients, disappointment about failing to provide safe care, fear of legal action or loss of employment, and anxiety about their reputation (O'Connor, Coates, Yardley, & Wu, 2010). The error can also disrupt the therapeutic relationship between the healthcare professional and the patient, with each party having to suffer alone. Second victims appear to suffer in many ways such as emotionally, cognitively, psychologically, and behaviorally, and in some cases their emotional distress has developed into posttraumatic stress disorder (Seys et al., 2012). If help and treatment are not sought out, patient safety and quality of care will not be maintained, and in turn, the healthcare professional becomes a safety hazard (Seys et al., 2012).

Goethals et al. (2012) describes this further by stating that when choosing to apply physical restraints for falls prevention, nurses appear to make a choice between safeguarding the patient, and mitigating harm to others, and respecting patient's autonomy. Then, although nurses are aware of past experiences and personal emotional factors, they will rationalize their final decision by denying these implications, and further justify that in the end, they are providing safe care. The concern here is that if

nurses make certain decisions around physical restraint use, which does not acknowledge their own personal feelings or past experiences with a traumatic event, they are more likely to experience inner conflicts (Goethals et al., 2012).

Lewis, Baernholdt, and Hamric (2013) conducted an integrative, literature review on the effects of patient safety incidents (or medical errors) on nurses. Lewis et al. (2013) mentions that the patient safety literature describes that safety incidents are usually the result of human error, due to gaps in processes or systems, as opposed to being caused by irresponsible healthcare professionals. Despite this notion, caring for those who make the error is not well established amongst healthcare organizations, and with little evidence to understand how they experience incidents. Outcomes related to nurses' experience of safety incidents include moral distress, burnout, intention to leave, and constructive change. Further, depending on the number of years, whether disclosure to the patient and support were provided, and even the work environment, all contribute to the type of experience they face once they have made an error (Lewis et al., 2013). What appears to be missing in the nursing literature as described by Lewis et al. (2013) is how experiences of moral distress and burnout further shape, or direct a nurses' decision-making process. Although Lewis et al. (2013) adds new learning to the nursing literature, there is still a need to increase the understanding of the effects of safety incidents on nurses, so that they can continue to feel comfortable with providing patient care, but also to be acknowledged that their feelings can have negative impacts to themselves and patients.

In addition, if past experiences are essential to developing heuristic strategies for clinical decision-making, the nursing discipline should inquire into how these experiences contribute to decision-making, with the aim of providing quality and safe

patient care (Cioffi, 2001). What is not known in the literature (Cioffi, 2001; Goethals et al., 2012; Lewis et al., 2013) and what this research study aims to describe, is a deeper understanding if nurses do acknowledge past experiences of traumatic events into their current decision-making. This understanding and acknowledgement should then drive healthcare organizations to further understand that patient safety is not all about providing safe care to the patients, but also to their employees (Lewis et al., 2013).

Patient Autonomy

Lindberg, Fagerstrom, Sivberg, & Willman (2014) state that “patient autonomy is not an absolute and begins with the patient in relation to the nurse” (p. 2209). It should be viewed as continuum and therefore, treated as a dynamic state that does not need to be the same each time care is provided. The basis of patient autonomy is respecting ones one’s right to hold views, make choices, and act on things that reflect their values and beliefs. Respecting patient autonomy is further evident by the attitude and behavior towards a person. With a recent push for patient-centered care and a societal demand for increased patient participation in the design and delivery of care. Lindberg et al.’s (2014) evolutionary concept analysis of patient autonomy in a caring context suggested that there is a lack of consensus on how nurses view patient autonomy, with a difference between ethical principles and ethical awareness. If nurses do not understand the conceptual meaning of patient autonomy, daily nursing care could be based on subjective and haphazard decision-making (Lindberg et al., 2014).

Lindberg et al. (2014) compared 41 qualitative articles that defined and focused on the patient perspective of autonomy within a caring context. Grounded theory appeared to be the most popular method of data analysis, however the range in

methodology included ethnography, phenomenology, systematic reviews, and one meta-analysis. The concept of patient autonomy appears to have been studied throughout all stages of medical management and support, ranging from acute and chronic units, to psychiatric, oncology, and out-patient environments (Lindberg et al., 2014). What is evident throughout the literature as described by Lindberg et al. (2014) is that patient autonomy presents itself when vulnerability is present. Vulnerability is present when one trusts themselves in the hands of another while at the same time, trying to maintain some level of control. Vulnerability then appears to be closely connected to supporting a patient's self-care, in attempts to allow the patient to retain some level of control. What is not evident is how quickly vulnerability can cause the complete removal of the patient's voice in decision-making (Lindberg et al., 2014). Does it occur when the use of physical restraints is applied?

The ability for a patient to make decisions could be functional, partial, or decision-specific, and is not specially related to one full question (Lindberg et al., 2014). For instance, if we think about an older adult patient who may have some cognitive impairment, we should not assume that they would prefer to be secured to a chair in order to feel safe and risk falling. Rather, functional competence could be around the need or no need for supportive equipment. Further, their capacity to make an informed decision could be presented in their ability to fight off a nurse attempting to apply physical restraints (Lindberg et al., 2014). Essentially, nurses interpret autonomy in different ways; the consequence results in different applications of autonomy in clinical practice (Aveyard, 2000).

The current literature supports that patient autonomy is not static, and it may be fruitful to focus on allowing the patient to have the ability to provide valid consent, rather than focusing on the word ‘autonomy’ (Aveyard, 2000; Moser, Houtepen, & Widdershoven, 2007). However only a few studies have explored how patient autonomy can be either supported or reduced by one factor, such as a history of falling (Goethals et al., 2012). Further, although nurses appear to weigh patient autonomy into their decision-making process on physical restraint use, they may be conflicted with their final decision: apply physical restraints, or maintain patient autonomy. Nevertheless, what is not described within the literature is a deeper understanding on what nurses are experiencing during the decision-making process of applying physical restraints for fall prevention, if there is a component of critical reflection of patient autonomy during the decision-making process.

Decision-making around Physical Restraint Use

In 2001, the Province of Ontario enacted the *Patient Restraints Minimization Act* (Bill 85) in order to minimize the use of physical and chemical restraints, and encourage the use of alternatives (RNAO, 2012). Despite organizational policy and procedure development ranging across Canada, within the nursing community there still appears to be growing concern regarding the continued use of physical restraints. The evidence explicitly shows that the use of physical restraints does not reduce patient falls; in fact, the use of them has been linked to falls, pressure ulcer and skin injuries, asphyxiation and death (Evans et al., 2003; Gallinagh et al., 2002; Oliver et al., 2007; RNAO, 2012).

Even physiological harm such as aggression, depression and demoralization has been linked to their use. Despite this, nurses strongly believe otherwise and insist that

their use is patient-centered, and ensures patient safety and risk management (Goethals et al., 2012). Further, when nurses' attitudes towards physical restraint use in older adult care was examined, nurses appear to reason with themselves with the choice of using physical restraints as a way to cope with their moral conflicts (Mohler & Meyer, 2014).

Physical restraints definition. For the purposes of this thesis, physical restraints are defined as “measures to control the physical or behavioral activity of a person, or a portion of his/her body” (RNAO, 2012, p. 19). Physical restraints also include a table fixed to a chair, or a bed rail that cannot be unlocked by the patient.

Providence Health Care (PHC) Least Restraint Policy

In 2012 and in accordance with the Joint Commission's 2010 standard on restraints and seclusion (as cited in PHC, 2012), PHC developed an Interdisciplinary Guideline for unsettled and challenging patient behaviors: least restraint approach (PHC, 2012). The comprehensive guideline provides support on how to assess and intervene when unsettled and challenging behaviors are identified by those who provide patient care. In particular, using physical restraints to prevent falls is included as an unsettled/challenging behavior, however the use of restraints should be considered as an exceptional and short-term intervention (PHC, 2012). For example, once an unsettled/challenging behavior is identified, a care provider decides if it poses imminent danger or not. Then, certain steps and alternatives are provided, which include document strategies and the outcomes of what technique was used. In addition, interventions to establish therapeutic rapport and nursing interventions are provided (PHC, 2012).

If restraint is needed, consent discussion must be documented within 72 hours that includes a conversation with the patient, their substitute decision maker, and the

interdisciplinary team. Furthermore, consent is an ongoing process in addition to ongoing assessment and interventions while restraints are in use. The most responsible physician must be notified and an order obtained within a particular time frame, depending on the type of physical restraint initiated. Last but not least, the patient, if appropriate, and family members must be provided with education and resources on recovering in a least restraint environment (PHC, 2012). An interesting finding was the guideline states, “A patient who is capable has the right to personal risk and so to refuse a restraint when his/her unsettled/challenging behavior does not pose an imminent danger, defined as violent or life threatening towards self or others” (PHC, 2012, p. 7). It would therefore, be advantageous to share and discuss this quote with the study participants to further understand how this impacts their decision-making process when choosing to apply, or not apply physical restraints for fall’s prevention.

When it comes to applying physical restraints for falls prevention, Goethals et al. (2012) describe that “safety” is presented as a way to control harmful behavior or risk-taking, with falls regarded as such. Taking risks by allowing patients to mobilize, despite having a known falls history, appears to be based on a nurse’s comfort level and their willingness to do so. Further, nurses are torn between personal and professional perspectives, as well as prevailing falls prevention cultures that strive to control unsafe behavior, rather than learn to understand the behavior. When it comes to the literature on the nurses’ decision-making process of using physical restraints, there has only been a small handful of qualitative studies (Goethals et al., 2012). Although it is not possible to generalize that the use of physical restraints for falls prevention is across all sectors of

healthcare, there appears to be a growing body of insight into the different internal and external factors that influence a nurses' decision-making process.

Goethals et al. (2012) eloquently describe a nurses' decision-making process for physical restraint use as a complex and dynamic process, and one that is not based on a linear process that repeats itself every time the query arises. The complexity of the patient's health status and the environment in which they are placed in are contributing factors to the final decision. Further, the decision is riddled with ethical and moral influences, all in the aim to provide safe patient care.

Nursing appears to be a culture of safety and control and when uncertainty and risky behaviors arise, it is not surprising that nurses will restrain a patient in accordance with their values of safety, as opposed to accepting the risk of patient's falling (Bigwood & Crowe, 2008). Surprisingly, it appears that the decision-making process is heavily swayed by contextual factors and convenience, rather than critical thinking and reflection of what good care means, especially when they are trying to balance their own moral values with patient autonomy and risk (Riahi et al., 2016). By following static policies that in some circumstances may cause more patient harm, and in order to not get in trouble, nurses lose their confidence and ability to challenge what is the best possible patient solution. Further, their ability to view patient care holistically and incorporate a rich view of well-being, which includes the patient's physical, psychological, ethical and moral needs, are lost (Dierckx de Casterele et al., 2015).

What stands out from the literature is that the decision-making process for physical restraint use is a thoughtful and complex journey; it is based on contextual factors and rigid rules that hinder a nurse from finding the best care solution and have the

ability to safely flex away from strict rules. Nurses are not able to challenge the status quo with their critical assessments and reflections and offer safe alternatives, which are more suited to the patient and their environment (Dierckx de Casterele et al., 2015).

Summary

The evidence supports that contributing factors such as lack of staffing, organizational culture, heuristics, and past experiences typically determine whether a nurse is going to attempt to prevent harm by applying restraints, or allow a level of risk of falling with prevention of injury (Gallinagh et al., 2002). However, when nurses decide to physically restrain a patient, they also appear to be swayed by external factors including a blanket concept of ‘safety,’ which appears to be the easiest rationale to neglect patient autonomy.

Although the concept of falls’ prevention in older adults has been well studied in the literature, less is known about what guides nurses’ decision-making process prior to using physical restraints. Further, the experiences that nurses face when making these decisions and how patients understand what risk is, appears to be a gap in the literature. It appears that the decision-making process to applying physical restraints is a choice between either providing safe care that limits patient independence, or promoting autonomy and risk-taking, but with mental/emotional consequences when harm occurs to both the patient and the nurse (Goethals et al., 2012).

What appear to be missing in the nursing literature described by Lewis et al. (2013) is how these experiences further shape or direct a nurses’ decision-making process. Although Lewis et al. (2013) adds new learning to the nursing literature, there is still a need to increase the understanding of the effects of patient safety incidents on

nurses, so that they can continue to feel comfortable with providing patient care, but also to be acknowledged that their feelings can have negative impacts to themselves and patients. Further, the literature search provided unknown knowledge and experiences faced by nurses on how certain concepts such as risk, uncertainty, and heuristics interact with each other in the face of decision-making. There appears to be a theoretical understanding on how there might be a relationship, however, we are yet to understand how this plays out in reality.

In the context of this research study, understanding the decision-making process with physical restraint use in light of patient safety, will help further our understanding of how other factors such as risk and uncertainty relate to nurses' overall decision-making process. The benefit of finding new and meaningful knowledge will not only contribute to the nursing discipline, but it will also provide further dialogue for understanding the different factors that influence decision-making and how best support nurses who may struggle with their decisions on a daily basis.

In summary, it appears that the decision-making process to applying physical restraints is a choice between either providing safe care that limits patient independence, or promoting autonomy and risk-taking, but with guilt-like consequences when harm occurs (Chuang & Huang, 2007). The literature regarding nurses' attitudes towards physical restraint use in the care of older adults implies that despite many having negative feelings towards their use, they still feel the need to use them in their daily practice, and employ coping strategies to deal with any unwanted psychological feelings (Seys et al., 2012). Further, and when in doubt, nurses tend to apply restraints in order to guarantee patient safety and reduce the error of unsafe acts from occurring, as opposed to

embracing safe acts and resiliency (Mohler & Meyer, 2014). Although the literature supports the social and environmental factors that contribute to the use of physical restraints, little is known regarding how nurses balance risk with patient autonomy in the decision-making process of physical restraint use for falls prevention.

By seeking to find a deeper understanding on how concepts such as physical restraints, risk, patient safety, resiliency, and second victim phenomenon interact and contribute to a nurses' decision-making process, we further show the realities of everyday nursing practice when faced with traumatic events, explicate their experience, and generate knowledge that is relevant for future patient safety initiatives, which includes caring for the nurse. Using interpretive description methodology (Thorne, 2008), this research study appears to be the first to explore how nurses balance risk with patient autonomy when making decisions about physical restraint use. Using interpretive description methodology, the researcher sought to understand what is already known, understand any gaps that may exist, and develop a deeper understanding on any commonalities and variations in the decision-making processes that nurses may face with balancing risk and patient autonomy.

CHAPTER THREE: METHODOLOGY

Qualitative Inquiry

According to Denzin and Lincoln (2005), qualitative inquiry is a participatory and collaborate movement that encompasses epistemological and ethical issues, and allows the researcher to further understand and engage in moral dialogue. Taken further, the inquiry phase can lead into qualitative research, which embraces a wide range of viewpoints and specific methodological techniques for understanding people in their natural environment. Essentially, a qualitative researcher is a quilt maker: they may use multiple methods or triangulation, in an attempt to reflect the different aspects of what a person or group experience, with the aim to provide in-depth understanding of the phenomenon in question. Further, multiple perspectives can provide further breadth, context, richness and rigor to the qualitative inquiry (Denzin & Lincoln, 2005).

The qualitative researcher is immersed within the phenomenon with an aim to understand meanings and experiences, rather than trying to find a single meaning. In order to understand and study the complexity of human behavior within a specific context, qualitative research allows the researcher to achieve this. Further, qualitative research allows the exploration of the meaning of a situation that people are involved with, or what experiences and values are important to them (Patton, 2014). In essence, the approach to qualitative research is grounded in philosophical underpinnings about knowledge, with a deeper need to understand the world around us (Patton, 2014). For instance, qualitative inquiry is founded on the common beliefs about ontology (what is the nature of their reality?) and epistemology (what is the relationship between the inquirer, and what is known?), as well as the methodology (how can we gain new

knowledge?). The combination of these beliefs' shapes how a qualitative researcher views the world and how to act within it. Being immersed within an epistemological and ontological net, the researcher does not search for what is the truth and what is false, but rather seeks to validate that what people experience is exactly that (Denzin & Lincoln, 2005).

In most cases, qualitative inquiry is founded on subjectivist epistemology and relativist ontology (Denzin & Lincoln, 2005). Subjectivist epistemology is the belief that knowledge is "always filtered through the lenses of language, gender, social class, race, and ethnicity" (Denzin & Lincoln, 2005, p. 21). The researcher becomes immersed within the phenomenon and through individual reflection and interpretation; they develop an understanding of the ethical, moral, and personal issues that are part of the phenomenon. The interpretation is not right or wrong; it is just a way of making sense of what is happening (Denzin & Lincoln, 2005). Relativist ontology is the belief that reality is a subjective experience, in which different realities are interpreted in multiple ways (Thorne, 2008). Essentially, what I experience in reality can be interpreted as something entirely different from another person's perspective on my reality. Given that our worlds are different, our interpretations of one experience can produce multiple realities. Essentially experience is subjective to different realities and multiple truths (Thorne, 2008).

Qualitative research allows the researcher to capture stories, experiences, and diverse perspectives of people and their world (Thorne, 2008). By observing and analyzing behaviors, a qualitative researcher can look for patterns of being and doing, and examine the implications of these patterns to everyday life. It allows the researcher to

find rich and contextual information on why things are happening. The beauty of qualitative research is that it gives voice to research by disseminating findings and shares the personal words and language of the research participants (Thorne, 2008).

The literature presented earlier describes the concepts and theoretical foundations of physical restraint use, decision-making, risk, and patient safety. However, what is does not describe is how these concepts come together and provide rich meaning of how nurses balance patient autonomy and risk in their everyday practice. In order to explore these patterns and provide credibility to the experiences reported by nurses, the qualitative research approach allowed me to take what is already known about the mentioned concepts, and develop a new understanding of their interactions with one another. It also allowed new understanding on what commonalities and variations exist and generate knowledge that is relevant for safe nursing practice. Essentially, the qualitative approach to knowledge inquiry tends to highlight the complexities of a human experience. The most striking theme to decision-making when balancing risk and patient autonomy is how complicated this journey is for nurses. The inherent complexity of this experience should be further understood and honored (Thorne, 2008).

Interpretive Description

According to Thorne (2008) interpretive description provides a bridge between theory and the realities of everyday clinical practice, in order to gain new insights in nursing and clinical settings. What happens in the real world that affects the experiences and practice of nurses can be at odds to what is described in theoretical literature. Further, the disconnect between what is assumed as being real, as to what is truly happening in the clinical areas, is feeding into a current theory-practice gap (Thorne, Kirkham &

MacDonald-Emes, 1997). According to Thorne, Reimer Kirkham, and O’Flynn-Magee (2004), interpretive description “acknowledges the constructed and contextual nature of human experience that at the same time allows for shared realities” (p. 5). This philosophical underpinning supports the need for epistemological and methodological grounding with qualitative inquiry, (Thorne et al., 2004).

Within the nursing science community, the underlying aim has always been to create themes and patterns for new knowledge, and therefore provide better and unique care (Thorne, 2008). For instance, when you discover new things about a person and formulate clinical assessments, these findings are then shared with the larger health care team, which in turn drives patient-centered and ethical care (Thorne, 2008). Therefore, with an understanding that at times there are disconnections between what we think is happening and what is really happening, interpretive description is a research approach that allows us to examine an actual practice goal and understand “what we do and don’t know on the basis of the available empirical evidence” (Thorne, 2008, p. 35).

Thorne (2008) describes the following philosophical underpinnings and methodological assumptions that ensure coherence to a study using interpretive description:

- Interpretive description studies are conducted within a natural context that is respectful of the ethical rights and comfort levels of all participants
- Clinical insight should be valued in conjunction with subjective and experiential knowledge as fundamental sources
- Develop deep understanding on human and individual commonalities, as well as variances within a shared focus of interest

- Develop and understand that issues are not bound by time or context, but rather be aware of the time and context within which the current experiences are enacted
- Acknowledge that a specific human experience cannot be separated from the very nature in which it exists in
- What humans perceive as one reality actually involves multiple levels of realities, and
- Acknowledge that what is known and what the human knows is an inseparable relationship that interact and influence one another.

Interpretive Description is a way to examine theory and its applicability of everyday nursing practice, in order to generate new knowledge and better understand the complexity of the nursing discipline. Interpretive description cannot be treated as steps or a formula in order to find new knowledge. When we examine risk and uncertainty, the same assessments of patient care in risky situations should also not be viewed and followed in a static, step-like formula, but rather based on applying specific techniques and procedures that suit the situation placed in front (O’Keeffe et al., 2015). The essence of interpretive description allows us to understand what we currently do and things we don’t know, on the basis of all available evidence (Thorne, 2008).

When I examined our current knowledge on the decision-making process regarding how nurses’ balance risk and patient autonomy with physical restraint use, I speculated that factors such as heuristics, past experiences, risk assessment, and a value of providing safe patient care, all contributed to the decision-making process. What appeared to be unknown was how the theoretical understanding of these factors played out in reality. Something related to patterns within human activity of this decision-

making process happens, however the literature reviewed did not appear to share the experiences nurses' face with these decisions. For instance, what appeared to be unknown in the literature on resilience and decision-making is what nurses' experience in times of uncertainty. If past experiences are essential to developing heuristic strategies for clinical decision-making, what else about this experience do we not know?

Essentially, the problem identified in the literature - the struggle to balance risk and patient autonomy – appeared to have been derived from a set of ideas and concepts that occur within the nursing discipline, which also have theoretical elements, but when combined, are not described as a theory (Thorne, 2008). In saying this, building a new theory was not the aim of inquiry through interpretive description. Rather, the intention was to confirm a particular perspective, and be drawn towards interpretations of how nurses' experience decision-making when balancing risk and patient autonomy.

The rationale for applying interpretive description was as follows: as mentioned, there was something related to patterns within human experience that remained unknown. What I wanted to know was how nurses make certain decisions within the practice context; the current knowledge provided me with a theoretical base, however it required a link to what really happens in their everyday clinical practice. There is obviously a disconnect between theory, research, and practice, and the more theoretical understanding shared, the less in-touch it appeared to be within the clinical setting. This matters because if the nursing discipline does not have sufficient documentation that describes or interprets theory within the practice context, then we essentially have knowledge that is not helpful (Thorne, 2008). The decision-making process for balancing risk and patient autonomy is incredibly complicated. Through interpretive description, particular features

of this decision-making process such as, heuristics, risk, and uncertainty, are explored to describe an understanding, which in turn, honors their inherent complexity (Thorne, 2008).

Research Setting

The research study was conducted within Providence Health Care (PHC), which is spread across 17 acute, residential, and community sites across the lower mainland of Vancouver, BC. PHC sites include two acute care hospitals, St. Paul's Hospital and Mount St. Joseph's Hospital, five residential homes and assisted living residence, a rehabilitation center, a hospice, addictions and youth health clinics, and multiple community dialysis units. PHC provides care for approximately 631,771 patients per year. Health populations of emphasis include, cardiopulmonary, renal, seniors, HIV/AIDs, mental health, and urban health (PHC Annual Report, 2016). The specific settings for the research study included nurses who are employed at either St. Paul's Hospital (SPH), Mount Saint Joseph's (MSJ), and Youville Residence. These sites were primarily chosen due to a higher proportion of RNs employed to SPH, MSJ and Youville Residence; other sites within PHC include residential care facilities that employ primarily LPNs and Care Aides, or are community out-patient settings, such as renal and youth clinics. Adding to this, both SPH and MSJ include a mix of acute inpatient units such as, medicine and surgical wards, and acute geriatric and residential care units.

Site one: SPH. SPH is an acute care, teaching and research hospital with 433 beds. Staffing levels to patient ratio for non-critical care, acute inpatient units range from one nurse to four patients, and up to 6 patients. In addition, one LPN may provide additional support for a nurse and their workload. RN's are scheduled on rostered and rotating 12-

hour shifts, and have the ability to swap shifts, or pick up overtime shifts, with a maximum of 7 shifts allowed (A. Harvey, personal email communication, March 31, 2017). Between Monday to Friday, 7am – 3pm, each acute inpatient unit is run by a Clinical Nurse Leader (CNL) that coordinate admissions and discharges with an Access and Flow CNL. After 3pm a RN currently working their 12-hour shift resumes the “charge nurse” role in addition to their patient load. Although the unit CNL endeavors to handover to a senior nurse, anecdotal feedback suggests that majority of the time the charge nurse is one who has been practicing for a minimum of 6 months (S. Barr, personal email communication, March 21, 2017). Care units within SPH that were excluded in the study included critical care, maternity services, Operating Room suites, perioperative, and postoperative areas. Critical care in particular, was excluded due to the fact that it was the researcher’s previously employment unit.

Site two: Mount Saint Joseph’s Hospital (MSJ). MSJ is home to both an acute care hospital with 101 beds, and a residential care home of 100 residents. Similar to SPH, the nurse to patient staffing ratio can range from one nurse to four patients, and up to 6 patients. The charge nurse and CNL model mimics that of SPH (S. Barr, personal email communication, March 31, 2017).

Site three: Youville Residence. Youville Residence is a residential care home with 42 residents that fall under the Elder Care program, and 32 older adult mental health clients: Parkview is a Mental Health Tertiary Care Unit that falls under the Mental Health Program (K. Smith, personal email communication, March 31, 2017). Staffing to patient ratios differ in residential care facilities to acute care facilities, which is described as the following:

- Youville Residence: 42 Residents
 - 0700-1500: 2 RNs/6 Resident Care Aides (RCA's)
 - 1500-2300: 1 RN/5.5 RCA's
 - 2300-0700: 1 RN/ 2 RCA's
- Parkview Older Adult Tertiary Mental Health: 32 Residents
 - 0700-1500: 4 RNs/6 Total Care Workers' (TCW's) (+ 1 Mon-Fri)
 - 1500-2300: 4 RNs/6 TCW's
 - 2300-0700: 2 RNs/ 4 TCW's

According to K. Smith, Site Leader for Youville Residence (personal email communication, March 31, 2017), a TCW is an individual who is registered with BC Care Aide and graduated with a recognized Resident Care Attendant Program. In addition, those hired at Youville Residence come with a minimum of two years' experience working with older adults with behavioral and psychological symptoms of dementia (BPSD).

Although the data collection was conducted in two phases – individual interviews and the focus group – they make up one sample and therefore, both groups were analyzed as one sample: phase one data collection was completed through the form of individual interviews; phase two consisted of a focus group interview with new participants who chose to only participate in a focus group. This is further discussed in the data collection section. Individual interviews were conducted in a corporate building located across the road from St. Paul's Hospital, is affiliated with the researcher's health organization, and is housed by non-clinical administrative support services for the health organization. The focus group took place at Youville Residence, within the Parkview unit, in a conference

room. The location is central to the unit and was chosen as those who were either due to finish or start their shift were able to easily meet in a common space.

Participant Selection

Participants for this study were recruited using the purposive sampling and theoretical sampling techniques (Thorne, 2008). With purposive sampling, specific individuals within Youville Residence were recruited in order to develop a better understanding of how they experience the phenomenon of interest. The aim of purposive sampling was to identify the main groupings that best describe the overall study findings. Purposive sampling built upon the theoretical sampling technique in order to dive deeper into the variations that are described by the key informants (Thorne, 2008). In this instance, the strategic identification of “key informants” were nurses who articulated their ability to balance risk and patient autonomy when caring for older adults, as they had the ability to describe “what happens and why it happens” (Thorne, 2008, p. 91). Further, these key informants (as described by Thorne, 2008) are everyday philosophers that have a particular alliance for thinking and viewing risk and patient autonomy situations within their everyday experience, rather than simply moving with the status quo. Once an RN showed interest in participating, and in order to identify participants that are torn between balancing risk and patient autonomy, the following screening question was asked: “what is your experience with physical restraint use?”

Information regarding the specifics on how potential participants were approached and informed about the study is further discussed in method of recruitment. If a RN suggested either a balance or imbalance between risk and patient autonomy, I

invited them to participate in the study. The aim was to gather contrasting viewpoints of what nurses experience during a common activity.

Method of Recruitment

Three methods of recruitment were utilized once University institutional and operational ethical approval was granted. First, invitation within the work environment of potential RN participants was sent with an email from the acute care unit's Patient Care Manager. Second, posters outlining the study with my contact information were displayed throughout the acute care units. The email invitation to participate, and posters provided a brief explanation of the purpose of the study, the inclusion criteria and my contact information. Third, I attended unit staff meetings to introduce myself (i.e., MN student and researcher role), the purpose of the study, and provide my contact information. Once nurses showed interest, I arranged phone consultations, in addition to email conversation that provided further information on the study proposal and purpose, as well as answered any questions they had. Further details about the study were also shared during these consultations, such as potential questions that they will be asked during individual interviews, confidentiality/anonymity, time commitment, voluntary participation, and the right to withdraw. Lastly, the informed consent process was explained and obtained prior to any formal interviews.

Inclusion Criteria

The inclusion criteria developed for participant selection included the following:

- Registered nurses (RNs) and Registered Psychiatric Nurses (RPNs) with current practicing privileges in two British Columbia hospital settings – tertiary and community based acute care

- RNs/RPNs employed in either a part-time or full-time acute care position for one year
- Minimum of 1-year experience caring for older adults (over 65) within acute care hospital settings
- Minimum of 1-year experience of using physical restraints for falls prevention
- The acute care setting in which they are employed in has a falls prevention guideline and policies on physical restraint use
- Proficiency in written and verbal communication in the English Language

This study excluded Licensed Practical Nurses (LPNs) and Care Aides as the literature examined for this research study only described the experiences and attitudes of RNs and thus, only examined the decision-making process for RNs. Nevertheless, there does appear to be a gap in the literature specific to LPNs and Care Aides and may warrant future research and inquiry. The study excluded those employed in a casual position as they may also be employed in non-acute care settings amongst other health authorities, and may not be as immersed in the culture of a specific acute care setting than those employed in full or part time positions.

Sample Size

The total number of participants enrolled in the individual interview proportion of the study was 7. The rationale to discontinuing study recruitment for phase one was that after the 7th interview concluded, I felt that a common set of themes were emerging. To me, it felt that a consistent conversation was shared and although there is far more to know and study as this topic involves many moving parts, my exposure to the 7 individuals provided rich insight into something so complicated. This rationale was

justified during the initial data analysis as the information shared provided in-depth and intensively rich themes. With that in mind, I felt that I was ready to move into phase two of the study, the focus group. I felt that I was provided a glimpse into something new, and something highly interesting and far more complicated than I ever imagined. For phase two, a total of five RNs participated in the focus group interview. No participant for the individual interview proportion participated in the focus group.

Rather than using the term “data saturation” as the limit to sufficient data collection, this research study provided a continuous and honest assessment of what new knowledge was drawn out from the participants and provided logical reasoning to those experiencing the phenomenon on a daily basis (Thorne, 2008). In addition, and similar to the dynamic state of risk within acute care settings, the overall sample size implies that there will be always be more to study, as the described experiences are dynamic within time and environmental settings, and not static to certain time and place (Thorne, 2008).

Ethical Considerations

Ethical approval from the University of Saskatchewan and University of British Columbia ethics board was obtained prior to implementation. In addition, local unit and hospital facility operational ethical approval was sought and granted once the overall University ethics boards approved the study protocol.

Maintaining confidentiality. Hard copies of study documents containing interview recordings were kept in a locked office. Paper notes such as field notes and my journal were also kept in a locked filing cabinet; computer files were stored on a computer that is password protected and only accessed by myself. Further, electronic documents and audiotapes were kept on my local work computer hard drive, and are

password protected. Participants will not be identified by their full name in any reports of the completed study, including this masters' thesis. Those who chose to participate in the focus group were informed in the consent process that only limited confidentiality could be offered, as I could not control what other participants do with the information discussed. However, I encouraged all participants to refrain from disclosing the contents of the discussion outside of the individual interviews and focus group. Study participation was voluntary and the participants had the right to withdraw from the study at any time. Prior to commencing the phase two focus group data collection, potential participants were made aware that although it may prove difficult to remove data that included their input from the focus group interviews, the data would be anonymized in the reporting of the research so that no one would be identifiable. Most importantly, this conversation was part of the initial consent process. All participants chose to remain in the study throughout both phase one (individual interviews), and the phase two focus group.

Informed Consent

Those who agreed to be contacted were provided detailed information on the rationale of the study, how the data would be collected and shared, in addition to answering any questions that I may not have already covered. Depending on whether the participants chose to participate in the individual interviews and/or the focus group, I emailed the specific consent form (see Appendix C. and D.) to the participant, which they were able to read prior to signing in person, as all participants were instructed that a signed formal consent process would take place prior to each interview and focus group. At the individual interviews, each participant was provided a consent form and were free to ask more questions; once written consent was obtained, participants were provided a

copy of the consent form for their records. Subsequently, at the focus group interview, each participant also completed written consent and individuals were free to ask questions. After the consent process for either the interview or focus group, each of the participants were asked to complete a demographic form, to provide information about the characteristics of the sample and assist the researcher with theoretical sampling (see Appendix E.).

In addition to providing details on the study process, participants were also informed on the potential risks associated with sharing experiences of patient safety practice. Re-telling stories could have unearthed unpleasant emotions of difficult and challenging patient care. Follow-up counseling to the Hospital offered Employee and Family Assistance Program BC (EFAP) was suggested to all participants. Stories described by participants that showcase underperformance or practice issues were not discussed with the unit nurse manager.

Data Collection

In an effort to develop a rich understanding of the study phenomenon, this study was conducted in two phases: phase one data collection was completed through the form of individual interviews; phase two consisted of a focus group interview with new participants who chose to only participate in the focus group. During the recruitment phase, nurses were given the option to participate in an individual interview, focus group interview, or both. Although data collection occurred in two phases, during data analysis, the two phases came together and were analyzed as one sample.

Individual interviews. Thorne (2008) eloquently states, “in essence, you are an encouraging and judgmentally neutral facilitator so that an individual can explain him or

herself as fully as possible” (p. 129). With this in mind, I carefully orchestrated a small list of open-ended questions (see Appendix F), and approached each interview with a neutral attitude and communication style that aimed to build rapport with each participant. The goal of the interviews was to foster elaboration, clarification, and if required, provide correction to any initial understandings I may have held to certain interpretations (Thorne, 2008).

The interview process was tape recorded alongside note taking of key points in which I returned to. However, the focus during each interview was to listen and promote further inquiry into their stories, with a genuine interest into what they were sharing (Thorne, 2008). In addition, a demographic data collection tool (see Appendix E.) was utilized in order to describe the sample and identify key informants, as well as seek variation between the participants, which is consistent with theoretical sampling. Prior to the first interview, a pilot run of the interview questions was completed with the researcher’s master’s thesis Supervisor, in order to ensure the development of relevant questions (Thorne, 2008). Once the study participants were recruited, a list of possible areas for discussion was distributed to each participant, with the hope of reducing any anxiety they may have over what type of questions may be asked. I then arranged a time and location for the interview to occur. Individual interviews took place off hospital site, in an interview room located in a hospital-affiliated administration building. A total of seven individual interviews were completed, each lasting approximately 45 minutes to one hour in length.

Focus group interview. The aim of the focus group interview was to bring a group of people together in order to trigger dialogue within a topic in which data is then

produced (Marck et al., 2010; Thorne, 2008). The number of participants in the follow-up focus group interview was five and included nurses who feel they struggle with the decision-making process of balancing risk and patient autonomy, and those who have described an ability to balance risk and patient autonomy. Participants were RNs employed at Youville Residence as they had expressed interest to share their story and experiences. All five participants in the focus group were new to the study and did not participate during the phase one, individual interviews. The initial analysis of data from the individual interviews provided themes that were further explored during the focus group interview. A new interview guide (Appendix G) was developed for the focus group, with a focus on the following five areas: (1) dynamic and fluid risk assessments; (2) patient factors: predicting the unpredictable moments of patient behaviour; (3.a) psychological safety for staff, (3.b) joint decision-making: the essence of teamwork; (4) physical restraints do not necessarily reduce workload; and (5) resources to match the rapidly changing patient population and goals.

A tactic that is recommended by Thorne (2008) is the use of a qualified focus group facilitator, in conjunction with the researcher present to document alongside recorded interviews. For the purposes of this study, interview questions were led by a qualified focus group facilitator, however I had the ability to interject and ask questions, which were previously acknowledged between the facilitator and the researcher. Further, I acted as a scribe to document names to experiences, as well as field notes of observed behaviors such as body language, changes to the tone of one's voice, pauses, or emotional reactions that the audio-recording were not able to pick up. For both data collection phases, and once the recorded information was transcribed, first names in the

form of a pseudonym name were attached to particular experiences. Every participant had the right to withdraw from the study at any time, and with no consequences in doing so.

Data Analysis

As previously mentioned, the two phases of data collection (the individual interviews and the focus group) came together and were analyzed as one sample. The qualitative data management software NVivo™ was used in the first phase of the data analysis process to manage and organizing the coding process of the verbatim individual interview transcripts. Coding was defined as sentences or broad-based themes, such as, “physical restraints with behavioural events” rather than coding specific words. As well the transcription software Dragon™ was used to dictate and transcribe the individual interviews. Further, this process was tracked and managed by ways of incorporating an audit trail alongside reflection journaling, so that my reasoning and decisional process was captured (Thorne, 2008). A unique study code was used to anonymize research related documents. Subject documents, signed consent forms and data collection tools that correlate participant names with their unique code was kept in a locked premise and stored separately from any study data that only I had access to.

During the data analysis process, I ensured that I reflected on my own potential biases, and carefully noted and examined these, in order to not bring unintended influence into what I was reading or hearing. Keeping in line with interpretive description, the initial data analysis started with some assumption that the decision-making process for nurses when balancing risk and patient autonomy is socially constructed, and in order to bring forth new knowledge, the data describes the similarities and variations amongst the participants’ experiences (Thorne, 2008).

Data analysis for individual interviews and the focus group interview included the following techniques:

- Individual interviews were audiotaped and facilitated by myself.
- The focus group was audiotaped and facilitated by a trained qualitative researcher that specialized in focus groups. I was able to observe, take notes, and track the dialogue in order to identify who said what (Thorne, 2008).
- With the support of a professional transcriptionist, we were able to complete the transcription process methodically. A confidentiality agreement was signed by both the focus group facilitator and the transcriptionist using the Confidentiality Undertaking form provided by PHC and in accordance with the Information Privacy and Confidentiality Policy.
- Once audio transcripts and field notes were available, I then independently read and become immersed in the documents, in order to develop a sense of the whole picture, which goes beyond the initial impression of what caught my attention (Thorne, 2008).
- Broad based categories that originate from transcripts were initially used to group the data, which then provided guidance on how to code the data. The data was then re-read, reflected on, and with possible themes hypothesized throughout (Thorne, 2008).
- I was open to re-categorizing data if a new emerging theme came through from the first data analysis. Each review was reflected and documented in the reflection journal (Thorne, 2008).

- At every step along the journey I communicated on a regular basis with my master's thesis supervisor at the University of Saskatchewan.

In accordance with Thorne (2008), the interpretive description data analysis process that I employed included the following tactics:

- I explored the data by reading and re-reading until I felt familiar with it, but not as much as feeling like I was an insider.
- I performed a thematic analysis in which I inquired into patterns and broad-based themes.
- I attempted to interpret and describe the data in a constrictive and meaningful way that aimed to speak to those directly experiencing the topic at hand.
- Excessive coding was avoided, such as word-by-word; instead I constantly asked, "what is happening here?" as this allowed me to stay engaged with the data and best understand the nature of the topic at hand.

With interpretive description analysis, there is a notion that the initial analytic stage will describe the current state or nature of the phenomenon and will be used as scaffolding for the study (Thorne et al., 2004). The difficult transition for myself was to have the ability to let go of any first assumptions, and using inductive reasoning, be open to new possibilities that arose. Essentially, it was up to me to drive the interpretation of the data, not a specific recipe, and as Thorne et al. (2004) states, "it is the researcher who ultimately determines what constitutes data, which data arise to relevance, how the final conceptualizations portraying those data will be structured, and which vehicles will be used to disseminate the findings" (p. 6).

The Role of the Researcher

The consequence of my current professional standing as Leader for Patient Safety is that my clinical and theoretical knowledge of patient safety had the potential to pull me from the role of the researcher, to the role of Leader. Further, the daily interactions of nurses who struggle to balance risk and patient autonomy that were identified under the role of Leader, is what provided me the passion to further peruse their experiences. In order to understand the role of the researcher and the implications of participating in data collection and construction, Thorne (2008) recommends that the researcher needs to abandon certain aspects of their former self, in order to take on the challenge of constructing credible and meaningful research. In order to prevent problems that may have threatened the overall integrity of this research proposal, I employed particular techniques for situating myself within the research role and within the research setting.

Within the research role. Reflexivity is an inherent characteristic of qualitative inquiry, in which documenting subjective or conceptual thoughts while engaged in the research process allows self-reflection and inform my inductive analytic process (Thorne, 2008). This was accomplished through a field notebook that documented personal and self-reflection journaling. This notebook was part of my life as a researcher and was readily available and maintained. Learning not to lead that is, not overtaking the interview process, is something that I paid close attention to. Given that part of my current healthcare professional role is to understand decision-making processes for safety practice, I could see how difficult it was for me to take on the role of someone I didn't know – a researcher - and someone who cannot bring expertise into shaping the conversation (Thorne, 2008). Therefore, a tactic that is recommended by Thorne (2008)

for this research study was the use of a qualified focus group facilitator, in conjunction with myself being present to document alongside the focus group interview.

Within the research setting. Although I know how to navigate the work system and believe that my established relationship with the older adult care units provided easy access to staff, I was also aware that those who I work with may not be so friendly or approachable once the research hat is on. The ability to step outside my current professional role and to represent, advocate, and recruit for the study was a possible challenge (Thorne, 2008). Given that this awareness and the need to reduce the possibility of perceived coercion to participate, recruitment for the study was conducted outside acute care units, such as critical care, within my health authority in which I had very little interaction with frontline staff nurses.

As someone who has the inside knowledge to this particular setting, I also needed to be aware of certain consequences to being an ‘insider’ that may have compromised the integrity of the research. For instance, some participants may have known that I am in a leadership position, and could have shaped their stories to avoid raising matters on unsafe acts, in fear of retribution (Thorne, 2008). Therefore, careful reflection was established and regularly maintained by myself in order to manage the research with the utmost integrity, as well as establishing ground rules during each interaction with participants (Thorne, 2008).

Integrity and Credibility

With qualitative research, the final product of what the research demonstrates is not solely based on what they claim the phenomenon to be. Rather, throughout the entire research process the researcher should establish study integrity and demonstrate the steps

and procedures taken to ensure quality is continuously met (Thorne, 2008). Traditional qualitative methodologies recommend concepts that evaluate the credibility of one's study. These include concepts such as, conformability, meaning-in-context, recurrent patterning, and dependability. Within each of these concepts the researcher will then demonstrate how they intend to abide by these concepts, such as member checking to test conformability. In keeping with accordance to interpretive description guidelines, Thorne (2008) suggests that alongside triangulation of data sources that will show representative credibility, and a demonstration of epistemological integrity, the researcher should apply additional concepts such as moral defensibility, contextual awareness and probably truth.

Moral defensibility. In order to rationalize the purpose of the research, I needed to prove the benefit of finding new information and how it would best serve those who warrant from it. Moral defensibility goes beyond standard ethical claims about human protection, and moves into appreciating new knowledge for the better good (Thorne, 2008). In this instance, questions on risk assessment and providing safe patient care could have brought out a certain level of moral distress from RNs. As an interpretive description researcher, it is incredibly important to consider the possible uses of these findings prior to knowing what will be told. Then, I can rationalize the findings and link them to a possible benefit for RNs, who could have found themselves' struggling to balance risk and patient autonomy.

In order to evaluate moral defensibility, I consistently asked, will this experience cause harm? From the commencement of the individual interviews and focus group interview, and then upon analyzing the data, it was imperative for me to reflect and create dialogue around particular events that cause participant unease, and question if the

knowledge extracted is necessary. This reflection and evaluation throughout the research process attempted to clearly link the findings to the original rationale of the study.

Thankfully, I did not come to a point where I noted any disconnect and potential harm that could have outweighed the benefit of this study (Thorne, 2008).

Contextual awareness. Many qualitative researchers are unaware that their background and their disciplinary perspective bind their own perspectives. Essentially, “we cannot see what we cannot see yet” (Thorne, 2008, p. 228). Rather, we need to accept that we are strongly influenced by the historical factors that surrounds our everyday work, as well as other shared assumptions by those amongst our discipline. The danger to this is that we can recreate the research to fit with our reality, when in fact it may not hold strong given a different set of time or setting. Instead, we acknowledge that our findings are contextual and explicitly recognize that it may not fit with other forms of reality.

As previously mentioned, my current role as Leader for Patient Safety had the potential to create an immense challenge for me to discard my current perceptions on what I believe may have come from the discussions. Adding to this, information gathered from the literature and anecdotal stories from frontline could have cause me to preconceive possible themes I expected to hear during the study (Thorne, 2008). The consequence to this could be during the data analysis process; I pick and choose the information I believe best suits my preconceived themes or assumptions.

In order to ensure that my own contextual awareness was being taken care of I employed the following strategies: First, any ideas that were brought to the study that did not originate from the data were documented and regularly examined, in order to be sure

that any preconceived ideas were not influencing the data analysis proportion. Second, reflection journaling became an important factor, as it allowed me to distinguish which ideas originated from a health professional lens, or a clinical research lens. This further allowed the removal of tainted analysis in which internal bias can play a part, or if the analysis was purely captured from the data (Thorne, 2008).

Probable truth. Despite thoughtful consideration and measurement of our procedures and findings, we cannot fully state that what we see is the truth; nor can we say confidently say that our research findings are entirely valid. Instead, what we should accept and recognize is that our new knowledge has considerable value to reality and is the best evidence we presently have, until we are confronted with new information that either supports or deviates from it (Thorne, 2008). This belief brings us back to the very core of why we do this type of research, which is to provide meaning to our experiences from this new-found knowledge, and what implications it may have for future nursing practice (Thorne, 2008).

Although the application of interpretive description provides meaning and sheds light to the real world, it does not suggest that what has been shared is the truth. Further, although the findings may bring us closer to reality, it does not reflect the entire story (Thorne, 2008). For instance, participant perspectives and experiences reflect what is going on in their clinical context, and may provide guidance on how to inform action. Through interpretive description, the truths of the participants' experiences of their decision-making process will be displayed, and although their decision-making process may shed light on an ontologically real world, one cannot state that the overall

perspectives shared from the participants are reflective of everyday decision-making.

Rather, we could state that what we see is the probable truth (Thorne, 2008).

The limitations of the study may be influenced by lack of the ability to state the “truth,” however, we need to consider the benefit of new knowledge that if it were true, can positively impact the lives of participants, other RNs in similar circumstances, and the patients who are under their care (Oliver, 2012). The beauty of inquiry is that it never stops, and will continue to seek new perspectives and experiences that contribute to further understanding of what nurses’ face in clinical practice, and how to support their ability to provide safe patient care, and possibly reduce the chance of harm to themselves and their patients (Oliver, 2012).

CHAPTER FOUR: FINDINGS

Introduction

Chapter four focuses on the results of this study and is organized to provide a deeper understanding of the participants as well as a description of what they experience, and what themes contribute to their decision-making process. The chapter begins with a description of the demographics for those who participated in the individual interviews and focus group. I then introduce an illustration, ‘A Balancing Act: Factors That Influence a Sense of Agency with Unsafe Patient Behavior’ and discuss the key themes associated within the illustration and highlight particular factors experienced by the nurse participants. Each theme will be introduced in the form of a story in order to situate ourselves amongst the data. Direct quotes from the individual interviews and focus group interview are also included to provide a more in-depth description and support for each theme, in addition to illuminate important insight shared by study participants. On occasion and when reading through the transcripts, I would be caught off-guard by some of the powerful and poignant accounts that appeared to capture the essence of what others also shared, and therefore, these quotes required honour, appreciation and mention in this study.

Sample Characteristics

Table one outlines the sample characteristics of all nurses who participated in the phase one individual interviews (n=7) and the phase two focus group interview (n=5). Their mean age was 39 years (SD = 11.68, range 25-58 years). There was a higher proportion of female (75%) versus male (25%) participants, with a broad range in the number of years practicing as an RN from 1 to 23 (M=7.54, SD=7.34). Eleven

participants had a baccalaureate degree in nursing as their basic nursing education; one with a diploma in nursing, one with a diploma and baccalaureate degree in nursing, and two with also having a bachelor's degree in another field. The work setting for those who participated included both acute care and residential care facilities, with some participants describing their patient population as mixed acute medical, elder and mental health. All individual interviews took place in the administration building of the researcher.

During phase two of data collection, the decision to conduct a focus group interview with nurses from the same facility was twofold: (1) during the recruitment phase, one nurse from Youville Residence requested if a group could meet and share their experiences with me because to them, the timing to share their experience and the complexity of their world was needed. And (2), to purposely build upon the theoretical sampling group from the individual interviews, in order to dive deeper into the different experiences and variations described by from the individual interviews (Thorne, 2008).

Table 1: Demographic Characteristics of Participants

Total sample size (n=12)

Demographic variables	Total n(%)
Age of RN in Years [Mean(SD)]	39 (11.68)
Gender	
Male	3 (25.0)
Female	9 (75.0)
Years of Practice [Mean(SD)]	7.54 (7.34)
Work Setting – Program	
Elder Care – Acute	6 (50.0)
Palliative	1 (8.3)
Mental Health	2 (16.7)
Acute Medicine	2 (16.7)
Elder Care – Residential	1 (8.3)

Position in Nursing	
Clinical Nurse Educator	2 (16.7)
Clinical Nurse Leader	1 (8.3)
Staff Nurse – RN	7 (58.3)
Staff Nurse – RPN	2 (16.7)

A Balancing Act: Factors That Influence a Sense of Agency with Unsafe Patient

Behavior Illustration

Figure one illustrates the main findings of this study in which nurses' decision-making around physical restraint use involves a continuous aim for balance for their patients' sense of agency, while at the same time managing and/or avoiding potential unsafe patient behaviours. Although this study had two phases of data collection, the data was analysed collectively, and therefore, findings are presented as a whole. I also make comparisons between certain outliers identified within the overall sample, in order to highlight variations within the data. Finally, negative consequences such as the potential for harm, negative impact to patient-centered care, and long-term reduced mobility implications is discussed within each theme rather than as a separate theme.

A Balancing Act: Factors That Influence a Sense of Agency with Unsafe Patient Behaviour



Figure 1: A Balancing Act: Factors That Influence a Sense of Agency with Unsafe Patient Behavior Illustration

A Sense of Agency

On one hand is the importance of nurses providing a sense of agency for patients. Nurses described that the goal for patient care is to ultimately promote patient independence and autonomy especially during moments of unpredictable and predictable unsafe patient behavioural moments such as, violence, and physical and/or verbal aggression. Participants described maintaining a patient's sense of agency as a culture that embraces the patients to feel that they have control and therefore, independence within their environment, with the explicit knowledge that risk is present and part of life. Autonomy was described as more than in-the-moment independence, but a critical review

of how certain things can be provided in order to fulfill long-term patient independence. Most participants were able to share experiences of providing care to patients who were independent with their activities of daily livings whilst admitted to an acute care unit but who also had the potential to fall or injure themselves due to various medical diagnoses. The struggle on 'how' to balance a sense of agency and reduce the chance of patient injury was apparent:

One in particular had pretty advanced Alzheimer and maybe some form of orthostatic hypertension. But whatever it was he was almost, like 80% of the time, he was totally independent and alarmingly so, so we were worried that he's going leave the unit. But there was one period of time he would fall, so he would literally fall every day so it's like, what are we going to do? It's like, you can't do anything more because he's fine and then the next minute, then he falls down. What is the solution to that? There is no solution to it (James, Individual Interview Participant)

Patient autonomy does not appear to be treated as an absolute, but rather it is constantly reviewed on a continuum and can be influenced by many factors presented throughout a shift. With this in mind, nurses described a change to the population they provide care for, which may challenge nurses to promote a sense of agency and allow this sense to adapt in new environments, such as a hospital. Along with providing care for frail, older adults, most nurses stated that they are starting to see an increase in younger baby boomers that are fit and strong, with early onset dementia or cognitive decline and mental health/substance abuse admitted to their care units. These individuals attempt to retain some level of control whilst in hospital but are also dealing with responsive behavioural concerns and unexpected reactions to their environment, as a result of their cognitive decline:

These patients don't appear to understand one another, and they see some people around them as threats...When you're home you have independence...A lot of people come here and they're like, why I am not at home? That's like the biggest triggering

factor for them. And their irritability and aggression come from just that (Beth, Focus Group Participant)

With this in mind, nurses understand the struggle that many patients face when admitted to a foreign environment in addition to a devastating and life altering diagnosis, and therefore, nurses critically reflect on promoting a sense of agency during the decision-making process of whether or not to apply physical restraints. Most nurses perceive a patient's response to being restrained as their way of expressing distress in being restrained and their way of making an informed decision. In addition, some nurses expressed the need to provide the opportunity for patients to take ownership and were considerate in finding ways to make this happen. In one example, Kelly explains an experience where one of her patients, post hip surgery, mobilized to the washroom without calling for assistance, which appeared to frustrate the unit physiotherapist:

The patient has to take some responsibility as well because they're competent and we told them to ring the call bell and they were given the call bell. If he had used it, we could have assisted him appropriately. It wasn't like he was being obstinate or anything, I think he just thought, "I'm doing pretty good, I can probably make it on my own." (Kelly, Individual Interview Participant)

Nurses are at a stage in their practice where they believe that by knowing what provides calmness to patients, they are able to promote a sense of agency and continue to promote a long-term goal of autonomy and independence. With this in mind, most nurses expressed the need to rely on knowing the patient and their personhood, in addition to a range of de-escalation techniques, in order to avoid the use of physical restraints. This will be further explored later in this chapter.

Unsafe Patient Behaviour

On the other hand, nurses aim to manage and avoid unsafe patient behaviour situations. Unsafe behavioural events included responsive behaviours from those with

dementia such as reacting to noise, people, voice, bathing, which result in physical or verbal aggression either towards the nurse, or other patients, in addition to patients with a history of violence choosing to respond aggressively. In addition, nurses are aware that unsafe behaviours can occur without warning that further increase the chance of a patient falling or escalating behaviour, resulting in injury. In light of this, nurses do not look to physical restraint use as an effective way to manage unsafe behaviours or impulsive movements and would rather rely on de-escalation techniques in addition to understanding cues and triggers that either prompt the need to intervene or continue monitoring, alongside understanding the root cause to their response and provided treatment, in order to prevent the slide into physical restraint use territory. Later in this chapter we will discuss these cues, triggers and de-escalation techniques.

The choice to represent a sense of agency with unsafe patient behaviour as an interrelated concept came to light during data analysis: I noted that all participants shared a common assumption: that if certain things were put into place then the right outcome would happen. And when an outcome occurred that was unwanted (e.g., patient or staff injury, or unsafe patient behavior), despite promoting a sense of agency, this left a feeling of confusion and uncertainty to their decision-making process. Essentially, if nurses perceived one thing to occur then sometimes the opposite would happen and usually occurred with surprise.

"I did things the way I'm supposed to, and it wasn't effective. You kind of feel a little bit cheated (Kelly)." Kelly further described a story where she attempted to promote a sense of agency for a patient and applied the falls prevention guideline to reduce the chance of a fall and injury: a sense that the outcome would be positive. And then her

patient fell and injured herself, and within a moment, something that was supposed to be positive, reversed to something negative, with Kelly feeling psychologically harmed, and the patient physically and potentially psychologically harmed.

In light of this and other stories, many participants shared their ability to learn from patient safety events such as aggression, or their inability to provide patient-centered care, in order to mitigate future unsafe behavior events and potential for harm. Their ability to adapt to something negative and turn it into something positive was remarkable and spoke to their resilience. With this in mind, it made sense to combine a sense of agency with unsafe patient behaviour as an experience that is not mutually exclusive and can both occur at the same time, and at times be complimentary to one another.

Situational Awareness

An essential skill - as described by nurses in the study - to providing a safe environment that promotes patient autonomy is situational awareness. When prompted to reflect on how they balance risk with a sense of agency, nurses explained how the following core skills contribute to a deep understanding of the situation presented in front of them: the ability to conduct dynamic risk assessments, teamwork, robust patient care plans that allow nurses to understand the personhood of the patients, and the ability to provide a range of de-escalation techniques.

Dynamic risk assessments.

I don't think that if a patient falls it makes you a bad nurse...I think it's all about the different risk tolerance for falls and what that means for the patient...I think most people who fall they're fine because they're doing something that they feel that they need to do. (James Individual Interview Participant).

Nurses have moved towards a culture of accepting risk and promoting a sense of agency but are still cognisant of the potential for harm from unsafe behaviour moments. What most nurses shared was a sense of discussing risk and performing risk assessments that are not based on quick judgements, but rather, they are guided by the team's cue to either step in to mitigate a responsive behaviour or continue monitoring the patient. To some nurses, they accept that risk comes with moments of dealing with unpredictable moments and relished on their ability to flex with these moments and act within the values of their patients, but to also balance with making sure theirs and others' safety is maintained. Although most of the nurses focus on reducing harm from occurring to either the patient, themselves, or other patients, they purposely sought out a reason to understand what factors contribute to a patient's unsafe behaviour, as opposed to controlling an unsafe act.

Some nurses performed risk assessments as a team, rather than by themselves, and felt that the right decision was in line with their patient's values. Finding the root cause to the patient's sudden or increasing change in behaviour is included in the decision-making process. In the end, the decision to either apply physical restraints is based on a comprehensive nursing and team risk assessment that encompasses their inner knowledge, a snapshot of the ever-changing environment, patient characteristics and an overall feeling of knowing the patient. The heart of a risk assessment appears to be embracing the patient's voice: "should I keep her walking for a few more minutes, while I'm looking at her? She is leaning into the wall but she looks so happy walking" (Gail). Despite this, some nurses still feel that they make the final decision for some of their patients. As Gail states:

Because sometimes there are people, they don't know how to rest. They keep walking every day, all the time. The whole day, until their legs become really weak and they fall. So, they cannot decide for themselves anymore. That's where we make decisions for them. (Gail, Focus Group Participant)

What stood out is that the decision to either apply physical restraints or continue with de-escalation techniques was not based on the nurses' emotional reaction or distress. Rather, nurses reflect with one another on what is going on, and attempt to find the contributing factors and root cause to a change in behaviour: "It's all about digging deeper and finding the root cause of behaviour instead of jumping from observation to action" (Jill, Individual Interview Participant). Interestingly, most nurses shared that risk assessments were not completed in order to control the chance of a patient falling and getting injured. This may be an outcome of their unsafe behaviour, but falls prevention is not the sole goal to achieve – the goal is to reduce the chance of harm and injury, alongside maintaining the patient's sense of agency. Falls prevention is an ingrained practice amongst most nurses, but it is not the goal for safe patient care. As Cheryl states:

When we do the assessment, we know that they are at high risk for fall. But still, they are walking with that risk. So those patients, we try to put the non-skid socks and hip protector, so that even though they fall, they won't be, they'll be prevented from hip fracture. So ... And then when they go to bed, like we have the bed alarm, fall mat, the floor one, so that even though they fall from bed, it will be on that fall mat. And then there will be always one light in the bathroom so that they can have enough light in the room. (Cheryl, Individual Interview Participant)

For some nurses, they expressed that a final decision on how to approach – or not approach – a patient if the behaviour was perceived as aggressive or potentially aggressive, was down to the responsibility of the charge nurse: "Maybe some of the staff won't agree, but as a nurse I have to think about my staff, who's working on the floor, as well as other patients" (Cheryl, Individual Interview Participant). Some nurses expressed

that risk assessments and a plan occur before approaching a situation and with very little time to have a thorough discussion. The charge nurse assumes the role of facilitating a discussion that includes questions such as, “if we try this, what should we do if it does not work?” and, “what could possibly be underlying this behaviour?” (Jill, Individual Interview Participant). There usually appears to be a concrete plan and backup plan assigned to a risk assessment, which also includes proactive measures for anticipating further unsafe behaviour situations. Risk assessments occur as a team and are called whenever someone notices that certain factors can influence their desired outcome:

It can be a stressful time and maybe there's something you weren't thinking of or that you could have missed and somebody else points it out. The whole team kind of works together that way...each giving ideas, just kind of brainstorming if something's not going well. (Beth, Focus Group Participant)

Some nurses go beyond the information provided; nurses assign meaning to the information that builds a comprehensive picture of the situation. Essentially, they are asking, what is going on, why is it happening, and what can happen if we don't do something about it. As Beth states, “you just kind of have to flow with it, as it's happening”

With one particular nurse who works within an acute medical unit, James described that the use of a falls risk assessment is still treated as something static:

I think that they generally see the falls risk assessment to be something they already can balance between what's right for the patient, and what works into their workflow - in terms of what they're responsible for and what other people are responsible for ... I don't think the staff see it as an evolving thing. (James, Individual Interview Participant)

A sense of safety is connected to how well you function as a team. In addition to dynamic risk assessments, the ability to pull together has a team, discuss a situation and

come up with multiple plans are essential for overall safety unit safety. As Beth previously mentioned, there can be moments of high stress and bursts of unpredictable moments of unsafe behavioural situations, but what appears to maintain team resilience is the effectiveness of the team: “and then you just, the whole team kind of works together that way. Like giving each other ideas... Just brainstorming if something’s not going well” (Beth, Focus Group Participant). The hardest part as expressed by some nurses, was moments of unpredictability. In these instances, having the ability to take time to reflect on the moment and discuss the next step as a team appears to determine whether a team can avoid “full blown physical aggression” (Louise, Focus Group Participant). However, teamwork is more than making decisions together. Some nurses shared that teamwork is when “everybody comes to work” (Linda, Focus Group Participant). When further probed, one nurse explained that teamwork only occurs when everyone comes together with similar values, a deep understanding on what their role and responsibilities are, and a sense of being there for one another, and not working in silos. When asked what happens when team members have different ideas on how to proceed with care, or different values, some nurses expressed that they want to hear other’s discomfort with a plan and have meaningful conversation around what is triggering that nurse to disagree with the team’s plan. For some nurses, teamwork also consisted of knowing one another’s values and discomfort with ways to de-escalate an unsafe situation, which sometimes consists of physical restraint use. The impact of not having this information can potentially cause injury to staff and patients if the team are suddenly pulled into a moment of unsafe behavior:

It’s really difficult. You know, you’re already in the middle of the care and since some people are patient and one care aid said, “I’m not doing this anymore.” They then put

their heads up and walk away from us. So, three people left. Which, is not safe anymore because if there are four people holding all of the person's limbs, it will be much safer to do a restraint for them. It's very challenging. You cannot argue right in front of the person during that time, right? So sometimes there's a lot of frustration for us. (Gail, Focus Group Participant)

Some nurses acknowledged that you cannot change the person you work with. That is, there are some people with personality and value traits that clash with your own, which then cause strain and ineffective team communication. What drive people together is a common value that they want to come to work and be happy and feel safe, and in order to maintain this base, people need to share with one another things that clash with their own personal and moral values, and then to bring the conversation back to what is best for the patient's values, but also keeping in line with maintaining a safe environment for other patients:

Some of them, they might not agree for restraining the patient. So, we sit together and ask them, what are your concerns? If you can, you know, if you think that that's not right, then we'll try all the strategies before we apply that. We listen to them too. (Cheryl, Individual Interview Participant)

Many nurses expressed that their justifications for certain actions were well supported by team members that include physicians, physiotherapists, occupational therapists, pharmacists, and other nurses such as care aides or LPNs. Together, they make decisions that are in line with the patient's values, in addition to sometimes speaking on behalf for the patient. Many nurses noted patient safety to be a way of learning collectively to what makes a patient calm and promote their sense of agency, rather than attempting to control an unsafe behavior situation. They understand that certain triggers within the environment may contribute to escalating behavior and therefore, try to reduce

simulation and factors within the environment, rather than going to control the patient's behavior.

A successful and safe climate is when the team use a patient and relationship-centered approach to care and team decision-making: "It's really understanding those [The patient's] goals, those values, and then also on a moment to moment basis, looking at safety for both the individual and people around." (Cheryl). The decision-making process should not rest solely on the primary care nurse, but rather the decision is made by, and agreed upon by the team: "You cannot make your own decisions sometimes. You have to ask your colleagues what to do in this particular situation and get an opinion and then do. That's what we always do and what we are good in that" (Cheryl).

Robust care plans and comprehensive de-escalation techniques. The final skill for sound situational awareness is having the right resources to guide your decision-making process and the right tools to avoid the use of physical restraints: patient care plans and de-escalation techniques. Most nurses interviewed expressed the importance of knowing the patient, their personhood, and understand that certain triggers can cause a patient to respond with unsafe behaviour, and with all this information clearly documented in the patient's care plan, which is discussed daily as a team. In order for them to provide patient-centred care, most nurses interviewed expressed strong values around risk assessments being based on patient triggers, their personal history and personal characteristics. Care plans guide the overall care but appear to be tweaked daily or adjusted, based on new learnings from unpredictable moments of unsafe behaviour. What is different with the care plans discussed is how nurses attempt to capture personhood:

I think it's how well you know the patient. Because it's not, I think it's not about the experience. It's how well you know this person. You know that the way he walks if he's going to fall, or the way his facial expression. If he's in pain and he cannot decide for himself. If he's tired or you know, keep him ... To keep him walking. (Linda, Focus Group Participant)

A particular story stands out: one patient with no mobilization issues was known to break tables and chairs at unpredictable moments. Staff at times resorted to short-term chair restraint use, which appeared to cause distress amongst the team. When a family member came in the staff asked about this man's history – what was his occupation, and what hobbies did he enjoy once retired. They found out that he was a construction worker and was known as a demolition man; this may be a possible reason to why he enjoyed demolishing the furniture. In other words, furniture would sometimes trigger the patient to respond in an unsafe manner: demolish furniture. What staff also noted was that he was an avid walker, and since being admitted to their unit, he was not mobilizing as often as would normally at home possibly due to depression. The staff decided that in order to reduce the chance of him demolishing furniture and potential for harm, he needed the opportunity to exercise and walk throughout the day, but balanced quiet time around meal times:

Sometimes the patient would get too much stimuli from the room and their behavior escalates too. So, when the unit not that busy, we try to make him walk around. And now, he walks around all day. During mealtimes, he stays in his chair and he doesn't need any help.... he does still flip furniture, but we try to redirect him. We know the technique on how to redirect him. Once he's calm, then we let him continue walking. (Cheryl, Focus Group Participant)

When it comes to falls prevention, again, most nurses rely on the rich information collected in the patient's care plan that may alert them to intercept and prevent harm from

occurring: cues are a red flag for nurses to watch for and if noted, to decide if intervention, redirection, or continued monitoring is required:

First, we try to know him. Rather than the paper information that they come with. Because sometimes it might not be the same person. There might be some difference when they come to a new setting, new environment. So, we try to study him first... once one nurse finds what triggers them, we usually put it in their daily care needs. So, we know that that particular thing triggers, so we try to divert that person from that.
(Mary, Individual Interview Participant)

Both cues (the RN notices outwards) and triggers (inward from the patient) are documented in the patient care plans that are viewed by all members of the health care team. Further, the richness of these care plans contributes to how well the team function. That is, comprehensive patient information provided them with a range of safe choices on how to manage with both predictable and unpredictable moments, but also support critical thinking.

The ability to successfully de-escalate a volatile situation and avoid the use of physical restraints is a strong value voiced amongst most of the participants. De-escalation techniques are nonverbal behaviors that can help nurses' safely manage situations where there is potential for staff and patient harm. This includes learning how personal space, body language and listening skills can help deescalate a situation that has the potential to cause harm to the care providers and the patient. Rather than responding to an unsafe behavior such as verbal or physical aggression with the threat or application of physical restraints in order to prevent a fall or physical harm, nurses turn to their skill of de-escalation. In addition, behavioral concerns or a behavioral crisis add to the workload and therefore are something many attempt to avoid: "We'd snap at each other and get frustrated easily. So, having a patient with BPSD [Behavioral and Psychological

Symptoms of Dementia] or any kind of behavioral concerns really adds to the workload” (Jill, Individual Interview Participant).

Nurses want to learn how to provide care that promote the patient’s sense of agency and attempt to practice in ways that maintains some level of stability for them. For example, most nurses shared an understanding that certain triggers from within the patient or the environment contribute to escalating behaviors and therefore, attempt to reduce stimulation or redirect the patient in order to avoid a dangerous situation:

Sometimes there's a lot of people who are at the nursing station and in conversation and sometimes I do find, especially in mid-afternoon, the noise level's quite high, and it's right around sun downing time, and sometimes patients can become escalated around that time...Like any hospital, we've got many weapons of opportunity. (Jill, Individual Interview Participant)

Most nurses are proud and confident with their ability to de-escalate a situation and avoid physical restraint use, with some suggesting that it is part of their culture. Those employed to SPH and MSJ also include the use of security guards or a code white callout as a form of de-escalation that came with a sense of feeling safe, which also appeared to be a part of their culture:

I feel like they're always there when we need them, especially in code white's or just urgent situations. They come up quite fast. Just having them there, I feel backed up. I feel more confident than ... I'm safer. In case they should throw punches or lunges, at least I have someone there that's trained to physically subdue the patient and protect us. They're great. (Mary, Individual Interview Participant)

Interestingly, those who worked in units that admitted mostly older adults with dementia voiced their reluctance to call security or a code white:

Staff are relatively skilled at de-escalation and I think as a culture we don't even call code whites very often. Staff just manage on their own, and they are quite skilled at it, though I think we do ourselves a disservice sometimes by coping, by managing, until it reaches a point where staff are starting to feel burnt out, or maybe unsupported, so we

have done some education and said, "It's okay to call a code white. It's okay to call security. (Jill, Individual Interview Participant)

What is commonly described amongst the nurses was the fact that the presence of security guards could potentially trigger patients to continue escalating and produce a dangerous situation. The presence of a security guard can pose as a challenge to the patient: "I think the presence of the security guards poses a challenge to the effective individual. Sometimes they [the patient] feel like, "Oh, why are you guys here? Are you looking for a fight?" (Mary, Individual Interview Participant). Another participant, James also described experiences where the overhead alert for security support for their floor was enough to trigger a patient and escalate a patient's behavior.

What stood out amongst most nurses was a feeling that the current skills in de-escalation do not match the type of patients they are caring for. There is a shift on the type of patients admitted to units that predominately admitted older and frail adults:

Our population is getting stronger and younger. They're not your typical elderly. We have patients who are professional athletes and they're towering over us, right? Double our sizes. They could really easily knock us down and punch us. So that's our worry. That's my worry all the time. (Linda)

Most nurses expressed that in situations where they do not have security on-site they feel their current skills have no effect in reducing the chance of a dangerous situation, nor do they feel that their skills will keep them safe. Interestingly, the addition of how to avoid or dodge a punch and how this becomes part of a de-escalation technique was a common request: "They [patients] really punch you and you better be ... You better know how to dodge" (Linda, Focus Group Participant).

Cues and Triggers

I think it's the most important part, is seeing that first sign. If you already start your interventions, then prevent bigger problems or danger for the person. Like even, sometimes even just a simple act of getting them into their room where it's quiet and peaceful could make a big difference later on in the shift (Linda, Focus Group Participant).

Most nurses describe how attending to cues and triggers contribute to promoting a sense of agency and incorporate these into their decision-making process, as well as the patient's care plan. A cue was described as something the RN noticed occurring in front of them: the RN would view the patient do something such as lean against the wall while walking, which would cue decision-making - continue mobilization, or reduce the chance of harm and injury. When I asked one participant what a cue for them would be, the response was the following: "only if they're starting to be intrusive, are entering other patient's rooms, or continually intrusive into the nursing station, that's when it becomes an issue and we have to take control because other people are getting agitated" (Nick, Individual Interview Participant). Others mentioned that cues are dependent on the safety of others, but also the safety for the patient. For instance, most prefer their patients to ambulate throughout the day, however, if they start to notice the patient's leaning into the walls or approaching other patients where there is a history of unsafe behavior interactions, this would cue the nurse to intervene and redirect the patient and provide them other means to focus their energy on.

Other form of cues includes cognitive declines in their patients, which then alert the team to reconvene with the patient and family and re-evaluate the goals of care that align with the values of the patient:

They can change very quickly in a day. I can go on days off and it will be like "Wow, there's been a dramatic change in that person." And it can be an improvement, or it can the other way. It depends. And that's a cue because if it stays like that for two days

then we know it's probably a new baseline, and they're declining.” (Nick, Individual Interview Participant)

Other forms of cues include observing patients with other staff members, such as how the patient responds to the opposite sex providing care, or are a different ethnicity to themselves. Some participants recalled previous situations where they resorted to physical restraint use; following the application, those nurses expressed concern that they may become a future trigger for a responsive behavior and therefore, if a similar event was to occur and that nurse is present on the floor, this would cue others on the team to strategize how to safely de-escalate a situation: “They do remember the act of being restrained to some level and they know that they don't like you and that makes life harder most of the time” (James, Individual Interview Participant). This awareness and quick decision-making process were reported amongst nurses that work in areas with a higher population of older adults with dementia compared to those who worked in acute medicine and surgical units.

Another type of cue mentioned by participants was how patients scored on risk assessment forms such as the Confusion Assessment Method (CAM) or a falls risk assessment. Nurses employed to medicine and palliative care noted that although the assessment tools should cue the nurse or a team to evaluate if an intervention to mitigate or prevent potential harm is in place, this did not appear to be common practice. Additionally, if a nurse noticed an unsafe behavior moment, the practice of going back to the chart and following the delirium care plan appeared to be inconsistent. Whereas those nurses employed to Elder Care Acute, Mental Health, and Rehabilitation units did mention that in addition to noticing a change in the patient's behavior, they would go back to the chart, read what was previously recorded as a CAM or falls' risk score and

the interventions to manage, and either continue with the plan, or tweak the plan, depending on other variables occurring in that moment.

Some nurses shared their decision to apply physical restraints during meal time, with meal times being the cue for intervention. For example, Nick reported that some patients would appear agitated during meal times by walking around the dining room and disrupt others eating, possibly due to the increased noise and movement in a busy dining area. Mealtime would become a cue for Nick to provide a lap belt for the patient, as previous experiences noted that it's application would calm the patient:

I use it for meal time, if someone like that has advanced cognitive decline I use that for feeding. Get them focused, they don't need medication, I can be with them one on one, they're not trying to walk away or whatever and they can focus on their meal” (Nick, Individual Interview Participant)

A common shared experience was the feeling of guilt if nurses missed the chance to pick up on cues and would at times feel emotionally drained with continuously scanning of their environment:

I find it emotionally draining sometimes. Just because like I said, sometimes they can't tell you how they feel or if you missed certain small cues. And you're not aware, then you can't start the deescalating process earlier. You are kind of jumping into the situation, where you're being asked to restrain them and you really wish you could've gone back to when they first kind of started.” (Abby, Focus Group Participant)

Most valued their ability to use cues as a guideline, a safe path to continue promoting a sense of agency and reduce the potential for harm, and also apply their critically-thinking abilities by adapting to a situation, rather than reacting.

A trigger was described by nurses as something that occurs from within the patient that triggers a responsive behavior. For instance, in the above example that Nick described, an increase in the level of noise and movement in the dining room was

reported as a factor that triggered certain patients to appear agitated and respond with aggression. Most nurses shared similar stories of an aggressive situation that initially involved one patient, morphing into involving most patients within the room; the unsettled feeling in the room would trigger others to feel uneasy and respond with aggression, either physically or verbally: “If the unit's noisy, that can be a trigger for some people. So even if within themselves, they're not progressing. It could be just something that's going on around them as well” (Beth, Focus Group Participant). Linda reinforced this experience by sharing her view that some patients appear to absorb the same feeling another one is experiencing, which then triggers them to respond in an unsafe manner: “They see what's going on in the environment. And they perceive the environment differently. Or like, you know, they think that we're hurting this person. They think you're enemy and they're out to hurt you too. ”

Some nurses described themselves as being a trigger for certain patients, or they were aware of others that could trigger the patient to respond in an unsafe manner:

He responded to me though, so I was so fortunate. And I even said to the staff "Listen, he responds to me, so you can give him to me." So, it just was easier because other staff would just be fighting trying to get him to dress or, you know. And I was just "Okay, come with me." And he'd go.” (Nick, Individual Interview Participant)

One participant – James - described himself as a trigger for one patient, as he applied physical restraints in a previous encounter. Based on this learning experience, James and his team decided that it would be best for him to not enter the room to help deescalate future situations, as they felt James’s presence would trigger a potentially dangerous response from the patient.

Other triggers within the environment included a heated room during sun downing, which would further escalate an unsafe behavioral moment, nurses providing

perineal care, the presence of security guards, or the overhead call for security through the code white alert system. In addition, the act of positioning a patient in a chair with a lap belt does appear to be a trigger in itself, possibly as a result of previous unpleasant experiences for the patient. In light of this, and although most triggers have a potential for harm to occur, some participants described positive triggers that promoted the patient's sense of agency. For example, the patient's family was frequently mentioned as a way to deescalate a situation, as the appearance of seeing their loved one would cause the patient to appear calm. Additionally, the application of a lap belt may also trigger the patient to appear calm based on previous experiences, and allow them to focus on a task, such as eating.

A common experience nurses shared was the ability to miss the opportunity to observe triggers, which are mostly due to a change in workload, such as the application of another patient in physical restraints. Once a patient is in restraints, more focus, attention, and nurse management are set on one patient and therefore, the small triggers of other patients can be missed. On top of that, they have experienced an event that has most likely caused a shift in the environment and possibly increased agitation and stress for other patients, further increasing the chance of another patient escalating and becoming unstable, but reducing the chance for a nurse to miss a trigger observation: "You can focus all you want on one person, but you're then going to miss all those small triggers from other people" (Abby, Focus Group Participant). Therefore, most nurses expressed the importance of having a deep understanding and clear documentation on what triggers and cues potentially contribute to a response behavior or can be used to deescalate an unsafe situation.

Table 2: Summary of Cues and Triggers

Cues: Something the RN noticed occurring in front of them	Triggers: Something that occurs from within the patient that triggers a responsive behavior
<ul style="list-style-type: none">• The patient leans against the wall from continuously pacing or walking• Intrusive behaviour e.g. into other patient's rooms, other patient's meals• Approaching other patients with violence risk• Cognitive declines in their patient – either negative or positive• Patient's behavioural responses to other nurses – positive or negative behavioural responses. Includes the nurses' sex and ethnicity• Previous interaction between a nurse and the patient where physical restraints were used• CAM and Falls risk assessment scores• Meal times – to provide the patient to remain calm and focus on eating	<ul style="list-style-type: none">• Increased level of noise and movement in the dining room• Responsive behaviours from other patients such as physical or verbal aggression• The nurse - Previous interaction between the nurse and the patient where physical restraints were used• Heated room especially during sun downing• Providing personal cares• presence of security guard• Overhead call for security through a code white alert system• Use of lap belts and other forms of physical restraints – positive and negative effect• Family – positive response to deescalate a situation• New environment – not their usual home setting

Patient Characteristics

“I think it's how well you know the patient. Because it's not, I think it's not about the experience. It's how well you know this person” (Linda, Focus Group Participant).

Patient characteristics were described as something about the patient's unique personhood that contributes to a responsive and unsafe behavior moment. Most nurses described the importance of knowing the patient for who they are; understanding their personal history, their values, family, and their character, as a way to provide holistic patient care: “she loves to talk about having her nails done. She's getting quite agitated, maybe I'll compliment her on her nail polish” (Jill, Individual Interview Participant).

A frequent characteristic amongst the stories shared revolved around younger, and physically fit baby boomers admitted to their units. There are a certain group of patients that were known to be long distance road cyclists, marathon runners, who regularly attended their local gym prior to their hospital admission and therefore, had the expectation that once in hospital, they would mobilize frequently and independently, but also manage their own care:

One patient I can recall, she was very lovely, but as her disease progressed, it became harder and harder for her to mobilize. It was really important for her to have independence, and she didn't want to be a burden to other people. We tried to mobilize her as long as we could with a walker to the washroom, but I remember one day I had to tell her, "This isn't safe anymore. I can't support you to get to the washroom in this walker with just me here. Now it's, "We need more help," because she wasn't able to support herself. I was having to take her whole weight, so that was hard for her."
(Kelly, Individual Interview Participant)

Although most participants described caring for younger baby boomers with new onset dementia, the other side of the patient population included older frail adults. The challenge described by some nurses was the hesitation to utilize the same de-escalation resources for both patient populations. For example, although one patient appears frailer than the younger patient, both are exhibiting signs of aggression and or behavioral escalation, and both may require the use of security to help deescalate a situation:

I think our population to geriatric, sometimes we get legitimately young and strong people, but very often they're frail, so even if they are physically aggressive or they have behavioral escalation, that probably is why people hesitate or don't think to call security, because this lady's, you know, four feet tall and, really, what's going to happen? So, frailty is a big concern in their population. (Jill, Individual Interview Participant)

Some described the older adult population as a spectrum that require diverse needs, in addition to providing complex care for people that may be cognitively intact but

quite physically disabled, in addition to those with depression, apathy, and delirium. Adaptability appeared to be a common skill that most nurses portrayed. That is, what they knew of the patient today may not be the same tomorrow and therefore, most nurses were curious about knowing the patient in order to find ways to promote a sense of agency, and reduce the chance of potential harm from an unsafe behavior situation.

As previously mentioned, most participants described a shift in the type of patients admitted to areas that were once predominately for frail, older adults with dementia. Now, most are caring for young and physically fit patients that are used to living independently and therefore, part of understanding the person also includes learning from the family on what they believe the patient's risk tolerance is, in addition to where they may transition to. Most nurses felt that part of caring for patients was to continuously learn about them; the interaction between them and the family was essential to a robust care plan and achieving a goal that was in line with the patient's values and wishes:

If independence is really important to that person or to that person's family, if the individual has a higher risk tolerance or the family, lets me know he or she will fall, but we want her to be able to walk, or we want her to be able to maintain her independence, or we know she might wander, but this is the decision we make. So, it's really understanding those goals, those values, and then also on a moment to moment basis, looking at safety for both the individual and people around. (Jill, Individual Interview Participant)

Knowing a patient's previous violent history was a common factor shared by most participants; this key characteristic would become a cue for the nurse, their team members, and other healthcare providers: "I know that he has a wife that's quite concerned about him and his Alzheimer's, her safety as well. Apparently, he had threatened to hurt her physically before. That's why she was quite fearful for her own

danger” (Mary, Individual interview Participant). Most nurses were aware of the organization’s Violence Prevention Protocol and guidelines and strongly valued the safety of themselves and other patients, and therefore sought to learn and share valuable patient information. Interestingly, some nurses shared a sense of increased physical restraint use in the last few years than compared to 7 years ago where the use of physical restraints in the older adult population was rare. When questioned as to why this change occurred, Linda (Focus Group Participant) stated the following:

I think the population that we have been receiving, admitting recently, are younger and stronger. And usually they're coming from home. Yeah, so and here, we don't have security and everything. So, there's some incidents that you know, patients are really aggressive so some nurses have [applied physical restraints] one night.

Stories around nurses having to lock themselves in the nurses’ station due to aggressive situations was shared: it appeared that a sense of safety not only includes the safety of patients, but of themselves and other patients.

The Use of Physical Restraints

“You should want to avoid that full-blown aggression. That's the time that we have to put them in restraint” (Louise, focus Group Participant). The decision to apply physical restraints is regarded as a last-ditch effort. Physical restraint use was rarely mentioned for purely falls prevention. For instance, some nurses reported the use of physical restraints with falls prevention if the patient was showing signs of intrusion or were mobilizing all day and now were appearing to be unstable and leaning into the wall. Prior to restraint use, nurses would use non-restraint interventions such as redirection, family presence, review current medications such as benzodiazepine use, and provide additional resources from physiotherapy and occupational therapy, prior to choosing to apply physical restraints. As Abby (Focus Group Participant) stated, “I don't think we

ever want to use restraints. It's not like, a tool that we use. You just have to do everything you can possible before that's an option for us.” Nick (Individual Interview Participant) reported that physical restraints use was dependent on the patient and the situation, with the decision being ethically and not morally driven. Nor does he believe others abuse the use of physical restraints. What stood out with most participants was the justification for physical restraint use to their team members, family members and their leadership. For instance, some felt other team members or their leaders may not understand and trust their decision-making process to apply restraints and therefore, nurses took exceptional measures to document what contributed to their decision, what other resources they exhausted, and what impact they hope to minimize with applying physical restraints:

Putting on restraint is a very big issue in our unit. Right? Sometimes we disagree with the physician and that's what makes this difficult. And family does not agree either sometimes, you know, has a different perspective. Sometimes it takes time to prove the need for this.” (Gail, Focus Group Participant)

A common experience shared amongst most nurses was their emotional reaction once physical restraints were applied, whether they were lap belts or ankle and wrist restraints. Most would notice the negative effect restraints would have on patients, such as increased agitation or appearing emotionally upset, in addition to their own feelings: “It definitely didn't make you feel fulfilled in your role, because you're not achieving the patient's goals, but basically you're keeping them safe and yourself safe, but you're not achieving their goal of reducing their agitation or treating the underlying cause of delirium” (Kelly, Individual Interview Participant). With this in mind, most nurses would work with the family, the patient, and other healthcare members to strategize ways of continuing the use of non-restraint techniques, and learn more about the patient, which

includes understanding if medical issues such as delirium or a urinary tract infection caused moments of unsafe behavior.

Once a patient was physically restrained, the goal for the care team is to remove them as soon as possible; physical restraints are regarded as a short-term temporary measure to manage the behavior, but also being cognizant that physical restraints may further escalate an unsafe situation. Additionally, the application of physical restraints does not reduce workload or contribute to easier patient management. Most nurses interviewed shared stories of increased workload and paperwork, however these did not appear to be a deterring factor with choosing to apply them. Rather, nurses understand the rationale to increased monitoring and paperwork and would adjust their workflow momentarily to accommodate, while pursuing the goal to support a sense of agency with unsafe behavior moments:

Because when you put somebody in a restraint, you have to monitor them every 15 minutes, at least for the first hour. And then, so that adds to your workload, right? And also, when you have to like, help them to the toilet, that adds to staff workload. Whereas, when they're walking alone and can go to the washroom by themselves.
(Linda, Focus Group Participant)

Some nurses expressed additional concern that once a patient was physically restrained, their ability to miss cues or triggers from other patients further increases, which may lead to moments of aggression or falls occurring from other patients. Essentially, one action to one patient may have the potential to reduce situational awareness.

Nurses in acute medical and mental health settings reported a higher experience with applying physical restraints, with their application based on reaction to a situation than those employed to acute geriatric and residential care sites. One nurse shared a

common experience of their colleagues wanting to apply physical restraints to some patients who were aggressive because they felt safe and could not be attacked. Whereas those employed in elder care settings base their decisions around proactive measures and attempt to intervene before the situation becomes dangerous; bearing in mind that they were also cognizant to moments of unpredictability:

I think, as in any place work, that certain people have different approaches to care than you would, and because it's physically quite laborious to diaper all the time, it's sometimes hard to convince other nurses that this is the best thing for the patient and it's helping with the agitation. I think also, the patient was agitated, that was another reason they had to go in restraints. This is a little bit crude but, because they were putting their hands in their diaper, and it was getting really messy, and they're aggressive as well. It probably made people a little bit more willing to apply restraints than they would otherwise with them. (Kelly, Individual Interview Participant)

One nurse, Nick (Individual Interview Participant) shared an experience of choosing to apply physical restraints because he was time constrained:

Well, because the care aids weren't there, they were busy, all the other nursing staff are really busy, this person was aggressive or whatever, I couldn't settle them, I didn't have the time at that moment cause it's a morning and there's meds and checks and everything and the family are not there to assist and there's just no hands.

When asked how he felt, Nick reported feeling terrible because the decision was based on his needs rather than what was best for the patient. He then went on to say that although these moments are rare, there are moments of frustration and feeling that they have no other choice but to place a patient in a chair with physical restraints. Adding to this, most nurses share moments of pure exhaustion with the use of non-restraints and de-escalation techniques and although the Least-Restraint Policy supported the decision to resort to physical restraints, most felt that more could be done and shared feelings of guilt

with their application. Additionally, some mentioned a sense of failure if they chose to not apply physical restraints and the patient or others end up injured:

I just feel terrible, because of course you think, "This lady is in her 90s, and needing palliative care. What if she's broken a hip or something," and she was agitated so, again, you're not really meeting her or her family's goals for her. Yeah, so it doesn't feel good, and also to know, "I did things the way I'm supposed to," and it wasn't effective... You followed the protocol and still had the patient risks. (Kelly)

Another nurse – Bruce – further reiterated that unwanted outcomes affect him emotionally, as he wants to see patients living happy and independent lives while in hospital. A surprising insight shared by some of the nurses was how they are emotionally affected once physical restraints have been applied:

The other dilemma I run into though is the risk after we use the restraints. So, lots of times families say they're about to fall, we put them in a wheelchair. And then, especially the population we work with, they'll start to lose that mobility, to walk. And so, if the care plan is not really specific or it's kind of forgotten about, like it's our first kind of action, then I find that there's a long-term risk after we use restraint. (Abby, Focus Group Participant)

When coming onto their shift and a nurse notices that a patient they previously cared for was now immobile, possibly as a result of physical restraint application longer than anticipated, some take a moment to reflect if certain things not completed that could have been initiated – involvement of physiotherapy or occupational therapy – may have prevented an extended period of time in restraints, which could have resulted in a less immobile state. Some nurses are aware of this hindsight bias; although they may not be aware of this term, they attempt to make sense of why things may have happened, in order to learn and prevent a similar situation in the future. Abby (Focus Group Participant) goes on to state the following:

I always find that really hard to because I feel like I maybe put them in a wheelchair long-term when I could've stopped that earlier on. Because like I know a certain situation now, where somebody's in a wheelchair for just too long and then we get them out of the wheelchair and then their gait's unsteady and is that because they've been in a wheelchair for too long? Or because of their dementia?

Essentially, nurses shared awareness of the long-term implications from their actions, however this insight was only shared for those employed to elder care units.

The term “for safety’s sake” is not an acceptable reason to apply physical restraints, as many participants described that their application did not result in safe patient care and was not in line with their patient-centered values: “I do it for the benefit of the patient, not for me or my colleagues” (Cheryl, Individual Interview Participant). Further the decision to apply physical restraints is not only a team decision, but also a continuous assessment by the team. Questions regarding if the care is in-line with the patient’s short and long-term values drive the decision-making process and provide rationale to their decisions. Most nurses do not apply physical restraints because it is quicker to manage a situation, but rather, attempt to utilize multiple de-escalation techniques before making the decision to apply physical restraints, as the risks associated with restraint application is at the forefront of their decision-making process. And if physical restraints are utilized, they are only on for short periods and linked to a task such as ensuring the patient eats:

You know other people may give them medication and put them in the chair, but I would rather have them exercising. If I feel they're getting tired, if they've been ambulating all day, they're getting tired and they're not gonna focus to eat their meals. That's another reason why we would do it, so they can focus to eat their meal. (Nick, Individual Interview Participant)

The plan for providing safe patient care is not to keep patients safe: this is an outcome one hopes to achieve. The goal is to promote a sense of agency, which may include providing them means to focus on something such as eating or washing themselves, and the ability to do so requires numerous ways that builds on the nurses' ability to critically think, in conjunction with having the support of guidelines that promote flexible adaptation. Part of the goal may be the short-term application of physical restraints:

And it's only what, 30 minutes? 30 minutes most so that they can eat, cause otherwise they won't eat, they're too busy going in another room or something like that. And then if they're not eating they're gonna get weak and then there are falls risks, so it's like I'd rather have them sit and eat. (Nick)

Safety is now not an acceptable reason to apply physical restraints, as their application does not necessarily equal safety. In addition, most nurses shared justifiable reasons to why they may choose to not apply physical restraints that supported a sense of agency, despite a chance that the patient may fall: "Some people may need a restraint in bed at night. But their bed alarm is on so if they get up, the alarm goes on, they're still in bed, we can get them so that's their safety to prevent the falls" (Nick, Individual Interview Participant). However, there is a fine line that if crossed, triggers the team to make the decision to apply restraints; this line is constantly moving, depending on what is happening in the environment: "Yeah, it's like a fine line. You have to see that early sign and symptoms and you can deal with it" (Louise, Focus Group Participant).

Two nurses interviewed are strongly in favor of physical restraint, based on previous positive experiences. Kelly (Individual Interview Participant) was able to methodically describe that if steps such as de-escalation techniques, delirium management, and promotion of a healthy sleep-wake cycle were not effective with

reducing the chance of unsafe behavior moments or falls with potential for significant harm, then the application of physical restraints should be an acceptable option for staff members: “I think if all of those aren't working, then restraints might be a viable option just to keep the patient safe, but it should definitely be done in consultation with the family, and hopefully all of the team is in agreement about it.” Bruce (Individual Interview Participant) is employed to an acute elder care unit that provides assessment and stabilization for patients with mental and behavioral issues and therefore, the use of physical restraints should be an expected application, especially if all non-restraint resources have been exhausted. Bruce shared an experience where the use of physical restraints contributed to a positive outcome for a patient. In this instance, he was caring for a patient that had trouble sleeping due to his height and frame not fitting into their standardized beds and was more comfortable sleeping in a wheelchair. However, the team were worried that he was at risk of sliding out of the wheelchair, alongside the fact that their wheelchairs are not designed for nighttime sleeping. Instead the team found a bed that fit his frame and for short-term use, but also applied physical restraints to reduce the chance of him falling out of bed:

What happened is we decided to put the restraint because the Manager is agreeable to that and then we put him in a restraint; we had put a waist restraint with groin strap and then in the night time he's strapped. He stays in bed, and for some reason because he stays in bed then he had a good sleep. Overall, the application of the restraint gives him a benefit because he slept well, he gained so much energy and he was fully alert and awake, then he ate and then to the point that he got used to sleep now in bed without the restraint. (Bruce, Individual Interview Participant)

A third nurse described that although she is not in favor of physical restraint use, she has used them in the past to promote a healthy sleep-wake pattern. For example, one patient was known to sleep walk and was constantly bumping into the walls and

furniture. During one of her shifts she noted that the patient had not slept soundly for 48 hours and was frequently walking during the day and at night, and she felt that it was time to advocate for rest. The use of a sitter by the bedside failed to result in sustained sleep in the bed and therefore the team and in conjunction with the family decided to implement a Pinel belt once lying in bed:

We have to check every 15 minutes and the second hour we have to check every 30 minutes, then we have to check every hourly. So, we do hourly check and make sure that the patient is safe. If you do that, I think that you're doing some benefit for the patient because he's sleeping. After the sleep, we can see that he's bright, he's alert, he's eating better, he's talking, you know, he's engaging in other activities rather than he's always sleepy and not doing anything active that day. So, I think that benefits in that way. (Cheryl, Individual Interview Participant)

As previously mentioned, the use of physical restraints is more common with managing unsafe behavior moments and preventing physical aggression situations; most nurses want to make sure that their colleagues are safe, that other patients they care for are safe, and jumping to apply physical restraints should not be based on an emotional trigger within the nurse. Nevertheless, most nurses shared that they want their leaders to understand how they feel when placed in an unpredictable and scary moment, but trust the nurse's rationale to applying physical restraints:

At least if I go to work tomorrow and the restraint policy is okay to apply, and based on my nursing judgment and assessment on the situation I will apply it then I feel that I can reason it out, I can justify it why I have to apply it but if there is some kind of vague instructions about the use of a restraint then I myself I'm wondering I'm I going to apply it, I'm I going to be in trouble in applying this. (Bruce, Individual Interview Participant)

If in the position of Charge Nurse, Cheryl reported that in order for her to succeed in providing the best care for patients, she requires an array of choices towards her decision-making process:

How can I protect my staff, my other patients? How do I do that? Right? That's a big question. They are saying that [this is] a restraint-free organization, then you have to give us another option to choose. There are situations that doctors say yes, go ahead with the restraints. And sometimes they say no, don't use it. So, as the nurse what should I ... I'm in the middle. (Cheryl, Individual Interview Participant)

As previously mentioned, physical restraint use was described more in cases of unsafe behaviour moments than for falls prevention. Most nurses are able to justify and provide concrete evidence to support a least-restraint philosophy of care, however are cognisant that sometimes, falls cannot be prevented, however the level of injury can be mitigated. Interestingly the conversation between family members and the use of restraints for falls prevention appeared to be difficult conversation to hold:

So, I think as soon as you call them and say, "Your loved one has had a fall." They're immediately like, "Well, why? Why don't you put them in a wheelchair", and they don't realize that the more we put them in a wheelchair, the higher chances of falls. (Abby, Focus Group Participant)

Abby assumes that maybe when family members hear the word “fall” they are fearful that their loved one is hurt, or will be hurt. A patient tripping and bruising their knee was regarded as a low-risk for injury fall, however Abby wondered if all falls were regarded by family members as high-risk for severe injury and therefore, they request their loved one to always be restraint to a wheelchair. Adding to this, the conversation with family around falls prevention techniques such as having one side rail up does not appear to be a common discussion that occurs between most nurses and family members.

James shared the notion that part of his job is to have open conversations with family that despite all falls’ prevention measures implemented, some people may still fall: “I find, generally, when you talk to people about it, I think maybe families have this idea that a hospital is a perfectly safe place as opposed to what we actually know to be

the case.” In contrast, one nurse shared her discomfort with talking to family about physical restraint use, whether for falls prevention or to reduce the chance of an unsafe behavioral situation:

“I don't think we have to explain the physical restraints to family yet. I think that's a difficult conversation. That kind of goes into gray areas of should I be doing this? Why should I be doing it? What are we going to do about it next?” (Mary, Individual Interview Participant)

A Face to an Emotional Moment

I just hope that if one of the moments where I have to give that IM or restrain them, then I get really worried that they're going to remember. They're going to put my face to their emotion, because they can't tell me how they're feeling all the time, and that I'm then, going to be a trigger for them. (Abby)

A common experience shared is how nurses feel when something did not go as planned and either the patient or the nurse was physically and emotionally harmed. A face to an emotional moment is linked to an unpleasant experience between the patient and the nurse, which then can become a trigger for the patient that potentially may cause them to respond with unsafe behavior. For example, some nurses shared experiences of them being the individual that applied physical restraints to an aggressive patient. The moment when both lock eyes appears to contribute to the nurse thinking, “now they will associate me with an unpleasant situation.” After this occurs, it appears two things happen: first, the nurse reports this assumption to their colleagues, and it may be added to the care plan or unofficially tracked, in order to see if a similar incident may further increase the patient’s agitation or not: “They do remember the act of being restrained to some level and they know that they don't like you and that makes life harder most of the time” (James, Individual Interview Participant). Secondly, an unpleasant experience can impact the team’s values, as well as the emotional and physical health of nurses.

Some nurses shared similar stories caring for younger patients living with early onset dementia, people living with a psychiatric illness, or a more broad-based cognitive decline, and how caring for such physically strong patients was emotionally draining, especially when they had to intervene an aggressive moment and apply physical restraints. As previously mentioned, some patients appear to nurses as confused because they see nurses as strangers and find certain situations scary. Most nurses feel the impact to the overall aim of providing patient-centred care: "It's very hard to see them like that too. It's heartbreaking, sometimes. Maybe they want to do something, but they don't know how to express what they want. So, it's heartbreaking for the staff too" (Jill, Individual Interview Participant). When questioned on how nurses proceed with maintaining a positive relationship with patients, most of the time they rely on trust and an established relationship, however they realize that with the population they care for, some patients may never forget an unpleasant situation and forever change the level of trust, whereas others will simply forget.

The other difficulty was when more than one patient was involved in an unsafe situation and is also injured during a physical altercation. Most nurses shared that they now have to explain to more than one family why their loved one was injured and justify the team's decision-making process alongside what factors contributed to the event:

And if somebody, if an old person gets hurt, then you have to deal with two problems. This person and this other person's family. "What did you do? Why did he get hurt? You're not looking after them." So, it's very important to prevent it as much as possible. (Linda, Focus Group Participant)

In regards to the impact of the team values, most nurses shared experiences of team discussions either prior to intervening, or after an unpleasant intervention. Most nurses shared that because they and their colleagues have personal values in conjunction

with the organization values, certain decisions may not be well supported by others in the team. The guilt-like and remorse feeling would further be expressed if the decision resulted in a harmful outcome to the patient:

It's a struggle for the whole team because sometimes when you need like eight people to put this person in restraint and somebody, "Oh, I'm not doing it. I don't want to get hurt." And they're not paid to do this, to get hurt. To be punched, to be kicked. So how would you meet or execute the plan safely, if not everybody will agree. So that's when we go to our leaders and ask for their help so they can provide that. Directions for everybody. Because we need to be in same page and doing this. (Gail)

During the focus group interview, and when asked how they feel once at home and after a particular emotional moment, the group responded with laughter, or as Louise stated, it is all about “Self-preservation. You just learn to handle it and look back at it with some humor.” Linda went to describe that once they are home, “You’re dead. You just crash and I go to the shower and crash into bed. It’s not just physical, it’s emotional. Mentally.” The focus group shared moments of going home exhausted, and not able to reflect on the shift. One statement by Louise appeared to stand out and cause the focus group to take pause: “There are days that you can't stop thinking about it. Even in your dreams.” Most nurses expressed that emotional moments with patients can be traumatic; at the end of the day, they are human. They described moments of wanting to debrief as a team, and more so on the emotional impact to them. For instance, some described the need to just talk with their colleagues that what they are feeling is a normal reaction to an unpleasant situation:

I think personally for me, it helps for the whole team to sit down and talk and discuss what went wrong or what do you guys think would make this better next time? So, we can make another plan or devise a plan. (Gail, Focus Group Participant)

Most were able to describe moments of reflection from an operational lens but not from an emotional aspect. What most nurses shared was that after a situation, they continue and move on with the day: “You just go on, move onto another. You know, you go to work, right? Give meds and all that but as a person, you need to debrief” (Abby, Focus Group Participant). Adding to this, although nurses don’t stop to talk about their feelings, they are cognizant that something has affected their colleagues, based on their body language. However, they then feel that they have no time to stop and talk about themselves, given the fact that they now feel they need to catch up on their documentation and just want to go home. Beth states, “sometimes I just don’t want to talk” Beth goes on to share that the majority of her shift is spent talking and listening to people, and at the end of a day, or after a traumatic moment, she does not want to talk, and will seek out a quiet space where no one can talk to her. And for her, this is ok and her way of decompressing from a traumatic event. Nevertheless, only those within the focus group described the inability to not discuss their feelings is now encroaching on their own mental wellness and disturbing their own sleep patterns. Linda described her head wanting to explode sometimes because she cannot express what she is feeling inside, and “that's why, maybe sometimes you can't sleep in the mornings - still thinking.”

Another poignant moment stood during the focus group interview: while sharing stories of being physically injured by patients, a couple of nurses started to rub their shoulder or arm. When probed if they were ok, Linda stated that just thinking about how much she has thrown her body into a situation was causing her bones to ache: “For two weeks I remember my whole body was sore.” Most nurses felt incredible stress over

worrying about how their colleagues, both psychologically and physically injured, and are not sure what else to do. Most described knowing that they are not supposed to “take down” a patient, however they also feel helpless and are worried about liability issues if they moved away from a violent situation. Those who had onsite security felt less helpless than those who did not.

Summary

Nurses interviewed in this research study revealed a common experience of balancing a sense of agency with managing unsafe behaviour moments, regardless of their hospital setting, as illustrated in figure one. They experienced a reluctance to use physical restraints for the purpose of maintaining safe care and would rather rely on de-escalation techniques, as physical restraints do not equal a reduction in workload management. Participants expressed a concern around increased responsive behaviours and violence, and highlighted the importance of learning new techniques, alongside access to education on how to provide de-escalation to a population mix of both frail baby boomers, and younger and strong baby boomers.

Most nurses are able to clearly articulate a robust decision-making process that includes frequently updated behavioural care plans, situational awareness, knowing the patient’s history, and the struggle to withhold themselves from stepping into a violent situation when there is no security on-site. Additionally, they expressed the intense physical (e.g., pain, injury, sleep disturbance), emotional (e.g., fear, anxiety), and mental (e.g., avoidance of certain patients or even calling in sick to a shift) impacts these sometimes-violent situations had on themselves. Some required the need to debrief right

after an emotional moment, while others did not, and would rather allow their body to rest, and subsequently their minds.

CHAPTER FIVE: DISCUSSION

Introduction

The purpose of this study was to better understand how nurses balance risk and patient autonomy in the decision-making process for physical restraint use, in order to reduce the falls' risk for older adult patients in acute care settings. In the final chapter, I will summarize the findings of this study and situate them in the context of the existing literature. Although the literature review in chapter two revealed many different concepts that possibly contribute to a nurses' overall decision-making process, two areas of focus will form this chapter that were relevant to these study findings: (1) work as imagined to work as done: is knowledge truly translated? And (2) the potential physical, emotional, and mental impact to nurses. The rationale for this is to make sense of why a theme on violence prevention was commonly shared the study participants, in addition to further understand the emotional impact of traumatic events and situational awareness. I will then provide recommendations to the three relevant findings, in addition to suggestions for future research. Finally, the limitations of this study are noted.

Work as Imagined to Work as Done: Is Knowledge Truly Translated?

In chapter four I introduced an essential skill described by most nurses in this study: situational awareness. This was described as a way to provide and maintain a safe environment that promotes patient autonomy, in addition to a safe climate for health care nurses. This revelation stood out and caught my attention for a special reason: anecdotally, and throughout my time spent with frontline nurses in our organization, nurses consistently shared that they felt patient safety is compromised due to a task-focused shift that involved redundant paperwork, which compromised their ability to

provide safe care, alongside little interaction with their peers and inability to have meaningfully connection with them. Serendipitously, in March 2018 the Advisory Board released an infographic that called for leaders to take note and repair four distinct cracks in the care environment that if left, will break the foundation for a resilient workforce: violence and point of care safety threats, compromises in care delivery, no time to recover after a traumatic experience, and isolation in a crowd (Advisory Board, 2018). This will further be discussed in the focus area on the impact to nurses.

But why is this important for maintaining a foundation of situational awareness? Situational awareness is essentially knowing what is happening around you (Stubbings, Chaboyer, & McMurray, 2012). The most common and essential skill as described by nurses in the study was an ability to provide care within a safe environment that promotes the patient's sense of agency. Knowing what was going on around them depended on dynamic risk assessments, how the team was functioning or could function during a crisis, in addition to having the right tools to maintain a safe environment, with the aim of preventing harm from occurring. For example, most nurses reported the essential elements of understanding what cues or triggers contribute to a safe environment, or an unsafe and potential volatile environment. Nurses that cared for predominately older adults in elder care setting appear to embrace and rely on these, in addition to incorporating this information into behavioural care plans. Situational awareness requires that the information presented in front of nurses has to have meaning in order for action to occur (Stubbings, Chaboyer, & McMurray, 2012). For example, if a nurse notices a change in the tone of one of their patients and does not understand the reason for this, there is potential for them to miss out on a key moment to intervene and prevent an

unpredictable moment that could potentially harm other patients or their co-workers. Rather, nurses in this study and in particular those within an acute elder care setting appear to go beyond the information provided. That is, nurses appear to assign meaning to the information that builds a comprehensive picture of the situation. Essentially, they are asking, what is going on, why is it happening, and what can happen if we don't do something about it.

Stubbings, Chaboyer, & McMurray (2012) support this notion by suggesting that situational awareness and decision-making within the clinical setting is an essential skill that allows health care providers to manage complex systems and stressful situations. For nurses in particular, situational awareness allows them to make proactive decisions that incorporates the patients' needs and also considers other factors within their environment that could compromise safe care delivery. Factors such as fatigue, burnout, stress, time pressures and shortcuts appear to compromise situational awareness and thus, compromise patient safety (Woodward, 2010). Adding to this, situational awareness is decreased by a team's inability to communicate, lack of leadership, and group decision-making (Kranzfelder, Schneider, Gillen, & Feussner, 2011). Most nurses interviewed mentioned that decisions were made as a team, and these decisions are not based on ways to cope with any moral conflicts. This is contrary to the current literature that suggest nurses' reason with themselves and with their final decision, as a way to cope with their moral conflicts, but also rationalize their decision to apply physical restraints (Goethals et al., 2012). Those interviewed in this research study suggest that the decision-making process is a team effort and everyone has to fully agree to suggested plans; the final

decision is based on comprehensive assessments and takes into consideration their situational awareness.

So, what makes this research study's sample of situational awareness different from what is described in the literature? There are two thoughts to the contrast in findings between this research study and what is described in the literature: The implementation of the British Columbia Provincial Violence Prevention Curriculum (PVPC) and the commitment to trauma-informed practice could underpin meaning to situational awareness. Most nurses within this study look around their unit, their environment and think to themselves, if something is not done, then people will be harmed. They were essentially proactive and not reactive: situational awareness is not viewed as a static assessment and as a reaction to a harmful or potentially harmful situation. Despite complex patient loads and a lot of time spent listening, talking and de-escalation situations, there is a common value around maintaining a safe environment for their patients, visitors, and most importantly, themselves. Nevertheless, there was a difference between nurses in this research study, and what stands out is a shared understanding and meaning to intentionally set rationale for their actions, that go beyond the simple notion of patient safety (Stubbings, Chaboyer, & McMurray, 2012).

Work as imagined. The PVPC was developed by the Health Employers Association of BC (HEABC) in 2010 with support and commitment from organizations such as WorkSafe BC, BC Nurses Union, and the Occupational Health and Safety Agency, to provide a need for recommended and effective violence prevention education for all BC healthcare providers across a range of healthcare setting. In 2015, Providence Health Care committed to the prevention of workplace violence and developed the

Workplace Prevention Policy, to ensure care for healthcare providers aligned with Provincial recommendations. In 2015, the curriculum was refined and updated to align with trauma informed practice and dementia care (HEABC, 2010). The PVPC framework identifies four main responsibilities in preventing and protecting against workplace violence (consistent with situational awareness), which are: 1) recognize risk and behaviours, 2) assess and plan, 3) respond to risk, and 4) report and communicate (HEABC, 2010). A trauma-informed approach incorporates an emphasis on safety and trustworthiness for both the patient and the healthcare provider, by providing safe choices and an environment that seeks to ensure patients do not experience further traumatization or re-traumatization, and where they have the opportunity to make or be part of the decision-making process around their treatment (BCMHSUS, 2013). With regards to situational awareness, part of the education curriculum within PVPC is dedicated to recognising risks and behaviours, and promotes health care providers to gain awareness of the risk factors, stressors, and behaviours that may lead to a violent situation. Additionally, it provides education on self-settling strategies and point of care risk assessments. Finally, a strong component is centred around respectful verbal, non-verbal and vocal communication that aligns with a trauma-informed approach, in order to build relationships and rapport, work with the patient to develop behavioural care plans, with the aim to protect everyone against violence (HEABC, 2010).

As previously mentioned, some nurses in this research study expressed that risk assessments and the development of a plan on how to respond to triggers or cues occur prior to approaching a situation. The PVPC model encourages opportunities for health care providers to include the patient in this conversation, with the idea being that the

person's voice is guiding decision-making, even in a crisis (HEABC, 2010). However, as creative health care providers, we need to also plan creative ways of keeping ourselves safe while honouring the patient's plan as much as possible. The literature on nursing risk assessments state that in practice, risk is viewed in a liner process, which was also exemplified by some of this study's participants. That is, someone would identify a hazard and then set a plan to mitigate potential harm arising from that hazard. Most nurses within this research study took this view one step further by acknowledging that their environment is not as simple as set out in this process, and despite our best intentions, one cannot control the unpredictable nature of their setting. Rather, they embrace the unpredictability and have the support of their team and leadership to be flexible with their approach to assessment and management. For some study participants, decision-making is a dynamic and on-going process, rather than making final choices and then not adapting to moments of uncertainty. Only a small proportion of nurses noted that certain risk assessments should fall on the responsibility of allied health care members such as physiotherapists, and therefore, safety was broken into pieces and assessed by individuals rather than through a collective process. Decision-making and situational awareness are based on contextual factors, task-orientation, and based on convenience, rather than critical thinking and reflection.

For example, and as mentioned in the literature review, O'Keefe et al. (2015) suggested that managing risk is a dynamic process that should allow nurses to be flexible with guidelines in order to respond adequately to their ever-changing and demanding environment. Stubbings, Chaboyer, & McMurray (2012) adapted Endsley's 1995 Model into a concept map – situational awareness and decision-making by nurses - that indicates

how certain triggers such as patient and environmental factors, in addition to individual nursing and clinical factors contribute to the overall decision-making process for nurses. That is, decision-making is an ongoing process that is influenced by our complex healthcare environment. Additionally, nurses strive for a shared understanding of the patient's condition in order to have meaningful communication with their co-workers, with a strong need to have the ability to pull together a multidisciplinary team and discuss a situation in order for the team to have shared understanding of a potential risk and an understanding of the patient's goals, in order to carefully plan and provide safe patient care.

The response to unpredictable moments and the ability to adapt to a complex environment is supported by the literature (O'Keefe et al., 2015); in light of this, the difference between some of this study's participants on making sense of their environment and then applying flexible boundaries could be related to the type of support and understanding shared by their leaders. Most nurses interviewed shared their contentment with their leadership with regards to having support that is able to appreciate the effort they put into maintaining a sense of stability amongst unpredictable moments, in addition to supporting their decision-making process when choosing to either not or apply physical restraints. O'Keefe et al (2015), Stubbings et al (2012), and the PVPC framework reinforced the use of non-technical skills within nursing practice, as it supports responsive decision making and allows nurses to become proficient in adapting with unpredictable moments. In light of this, nurses in this study also shared a common view that their rationale to thinking outside the box is due to the current and static nature of how guidelines and policies are taught as a task to complete, rather than incorporating

skills into realistic scenario-based settings. Nurses are looking to bring adaptability into their environment, and to the current policies and guidelines, which also includes how safety is viewed. This includes ensuring that nurses are supported in applying non-technical skills to solve problems rather than relying solely on a task-oriented method of following assessment guidelines.

With this in mind, there may be a lag between what is captured in the current literature to what is practiced in reality, especially given the fact that provincial frameworks such as PVPC recommend a massive shift on how we approach – or not approach - people, what type of language we use, and to provide opportunities for nurses to partner with patients and make safe connections that aligns with evidence around dementia care and trauma-informed practice. This is potentially a gap in the current nursing literature and therefore warrants further study, including highlighting the evolving nature of nursing practice and how the movement towards incorporating a trauma-informed lens into everyday healthcare practice, which should not be specific to mental health and substance use centres.

Work as done. Despite the difference to what was shared in this research study and to what is captured in the literature, there is a disconnection between what was taught, and what was actually practiced during unpredictable and potentially frightening moments. For instance, nurses described the applicability of de-escalation techniques taught through PVPC and the P.I.E.C.E.S. framework. The P.I.E.C.E.S model takes a team and process-based approach to shared learning and understanding of the underlying causes of behavioural expression, with the goal to provide and support the patient's sense

of agency, and is starting to be incorporated within the context of caring for older adults (Hung, Lee, Au-Yeung, Kucherova, & Harrigan, 2016; P.I.E.C.E.S., 2013).

A fundamental component of the framework is for the health team to have a common set of values and common language for multidiscipline communication, with the aim for collaborate care and shared accountability for person centred and directed care. Despite the incorporation and targeted models for approaching patients with complex chronic and mental health disease, what seems to be taught – ‘work as imagined’ – may not consistently occur in everyday practice – ‘work as done.’ For instance, nurses in this study were able to link techniques learned through PVPC and P.I.E.C.E.S. (i.e., de-escalation techniques, understanding triggers/cues, behavioural care planning), to caring for patients who are both older and frail. However, when contending with a younger and physically stronger older adult, a level of uncertainty became apparent, with some expressing the need to learn how to avoid punches and take-down a patient; tactics that contradict the curriculum’s philosophy. Adding to this, there is hesitation to apply the fundamentals of the P.I.E.C.E.S. and PVPC literature to different populations within their care unit.

With this in mind, how do we ensure that the fundamentals taught in the mentioned curriculum are applied in everyday nursing practice? In addition, how do we provide meaningful education for nurses on specific patient characteristics, cues and triggers, which are essential for critical thinking and complex decision-making? Some nurses silo patient care to the patient population; rather than fitting a certain type of patient into a particular approach, we ought to approach people living with dementia, mental health, and neurocognitive disorders - whether old and frail, or young and robust -

with a similar approach to emotional connection and purposeful engagement (Coulter & Ellins, 2007). For instance, if nurses within this research study value a patient-centred approach, how do we incorporate models of care that not only underpin this personal and organizational value, but remain applicable to all patients under our care? Person-centred and person-directed approaches to care inform and enable patients and families to meaningfully engage with the care team and with their health, in order to maintain a sense of agency (Coulter & Ellins, 2007). This approach is authentic and meaningful, and is centred around improving health outcomes, the health experience, and contributes to effective knowledge translation to practice (Coulter & Ellins, 2007).

Nurses within this research study reported a strong desire to work in an environment that values the human need for safety. Their vision of safety was not limited to preventing physical harm; it encompassed psychological, social, and moral safety for patients and themselves. Essentially, if staff felt safe and were provided flexible boundaries to managing safe care, then their patients would receive safe care. During chapter two I discussed the use of physical restraints application as an effective measure in preventing unsafe behaviours such as impulsive movements, especially in the older adult population (Mohler & Meyer, 2014). Nurses interviewed in this study strongly disagree with this statement; in fact, when approached with this question, nurses responded with a look of disgust and shock. Most nurses see more harm coming from controlling patient behaviours, unless the potential for injury was significantly high, and would rather exhaust all types of de-escalation techniques before resorting to physical restraint use.

Aggression is well documented in the literature as a long-standing complex and international problem (Pekurinen et al., 2017); the use of physical restraints to manage responsive and violent behaviours has been well documented as a last-ditch attempt by the National Institute of Clinical Excellence (2005) and was noted during this research study. Although the practicalities of applying physical restraints by nurses is well documented, there is evidence to suggest that one health care provider is injured in every five incidents of physical restraint use (Lancaster, Whittington, Lane, Riley, & Meehan, 2008; Leggett & Silvester, 2003). Adding to this, the current PVPC curriculum does not incorporate training practices in the use of physical restraints, in addition to nurses' overall lack of awareness of the magnitude of the risk of musculoskeletal injuries. Reflecting on a particular moment observed during this research study's focus group, I find it ironic that one study participant requested the need to learn how to avoid punches and take down a patient while rubbing a previous injury sustained whilst physical restraining a patient.

Despite learning the theoretical components of least restraint and de-escalation techniques, when faced with a potentially threatening behavioural situation, some study participants want to intervene and control a situation, which is the opposite of what the PVPC curriculum suggests. For instance, providing space by acknowledging that a patient may be in a flight or fight response and therefore, may not have the ability to rationally think and follow commands, is recommended practice (HEABC, 2010). In a moment of uncertainty that may cause the nurse to also be in flight or fright response, the fall-back action is centred around control. That is, nurse feel the need to do something, and it appears that "something" is a physical task (Bigwood & Crowe, 2008; Kolanowski,

1999). Nurses want to manage unsafe behavioural moments, which may not require physical restraint us. However, there is a perception that de-escalation approaches and a patient-centered approach have a moderate influence in reducing the likelihood of aggression (McCann, Baird, & Muir-Cochrane, 2014). What is missing in the literature are the barriers to knowledge translation, specific to approaches such as PVPC, P.I.E.C.E.S. and trauma informed practice. With this in mind, do nurses feel that if they step away from a situation and avoid hands-on care, they are abandoning their patient? What support from their colleagues and leaders is required for nurses to know that stepping away and not providing physical control is a form of care?

Is knowledge truly translated? As previously mentioned, the fundamentals of the P.I.E.C.E.S. framework is a learning and development model that is built on engaging the practitioner during education, and ensures that knowledge is delivered in a culture that embraces continuous quality improvement and a shared commitment to learning and practice improvement (P.I.E.C.E.S., 2013). Further, the concepts taught need to have practical implications to the care providers specific setting and environment in conjunction with a shared team value. Although participants in this research study have comprehensive knowledge on concepts associated with situation awareness, the knowledge translation bridge may require the building blocks of shared values, a culture for continuous quality and practice improvement, and a commitment for learning and practice accountability (Straus, Tetro, & Graham, 2011). Additionally, what is taught may require practice with everyday scenarios in order to further embed the philosophies that support models of care such as PIECES, PVPC, and trauma informed practice (Brouwers, Stacey, & O-Connor, 2010; Curry, Fitzgerald, Prodan, Dadich & Sloan,

2014). Finally, prior to health care programs initiating new approaches to care, guidelines to ensure knowledge is translated and regarded as meaningful for nurses is essential. Lastly, the unit and personal culture of a care unit should value continuous practice improvement and quality of care, which aligns with a patient-centred approach to health care (Straus, Tetro, & Graham, 2011).

The Emotional Impact on Nurses

As described in chapter four, most nurses shared that the use of de-escalation techniques make up most of their day and is emotionally draining. Some nurses shared a sense of feeling guilty or “bad” when they missed a cue, which they believe could have allowed them to intervene and possibly prevent escalating behaviour. Adding to this, an unexpected but not surprising finding – given the robust evidence on second victim phenomenon – was how impactful the balancing act process can be on them professionally and personally. For instance, the notion to just put the event to one side and keeping moving forward can have detrimental effects both personally and professionally, and can create a ripple effect of negative outcomes to their co-workers, managers, other patients, and even the organization (Chuang & Huang, 2007; Seys et al., 2012).

Nurses in this research study stated that they cannot stop thinking about particular scenarios, and at times dreaming about them; despite requests for emotional debriefings, there was no mention of knowing how and when to emotionally check-in with co-workers. Debrief sessions occur as a follow-up to a traumatic event, however what is missing are the unofficial emotional check-ins and acknowledgement that frequent workplace stress can impact the wellbeing of nurses, both professionally and personally

(McCann et al., 2013). If an unanticipated patient safety event occurs as the result of their decision, the consequence of their decision can be quite traumatic (Chuang & Huang, 2007). The “second victim” phenomenon is when a health care professional feels personally responsible for their actions and feel as though they have failed their patient (Seys et al., 2012). Feelings of failure can include distress, burnout and loss of confidence (Seys et al., 2012). After the event, and regardless of whether it did or did not cause harm to their patient, defensive and constructive changes to their daily practice have been reported, and with further evidence to support a significant impact to their personal and professional life (CRNBC, 2018; Seys et al., 2012). If emotional feelings disturb sleep patterns, disrupt social networks at work, or retention is not addressed, in addition to not confronting that cumulative stressful experiences contribute to negative patient care, we are then essentially supporting a nurse towards a path of secondary traumatic stress and post-traumatic stress disorder (Beck, 2011; Cieslak et al., 2014; Mealer & Jones, 2013).

After a stressful situation, most nurses in this study (and also presented in the current literature) evaluate what contributed to the problem, and problem-solve for future learning, in order to either prevent or mitigate the same problem from occurring, alongside regulating their emotional response (McCann, 2013). An adaptive coping method that is common amongst the nursing population are problem-solving and social support (Parikh, Taukari, & Bhattacharya, 2004). Avoidant coping is one of many maladaptive coping skills that are strongly associated with work dissatisfaction, defensiveness, and further result in a nurse’s inability to handle their emotional reactions to stress. Despite this, although successful coping with emotional distress may contribute to personal and professional growth, some may experience some level of emotional

distress. With this in mind, organisational strategies, in addition to personal coping strategies such as work-life balance, or spirituality, appear to be instrumental in overall resilience building and emotional handling (Badolamenti, Sili, Caruso & FidaFida, 2017; Joseph & Linley, 2008; Sumi, Yoshida, Sugimura, & Yano, 2018).

Whilst I was analyzing the data, it became apparent that the missing key is self-reflection; from the impact a situation has on nurses and sharing their feelings with the team, in addition to the team reflecting on the situation and how to either prevent, or mitigate further unsafe behaviour for future events. Their ability to look back in order to look forward could be due to hindsight bias, which in itself could hinder learning. Essentially, “hindsight is not equal to foresight” (Henriksen & Kaplan, 2003, p. 46). Hindsight bias does not allow people to make sense of the decision-making process and not capture the complexity and uncertainties faced during a moment of quick decision-making. For example, comments such as, “if only I had involved the PT sooner once they were immobilized to the wheelchair” automatically makes the nurse feel like they failed in providing best care and should have acted sooner; hindsight bias causes the nurse to blame themselves and automatically look to their practice with a punitive approach, which then hinders future learning (Elwyn & Miron-Shatz, 2010; Henriksen & Kaplan, 2003; Roese & Vohs, 2012). With this in mind, how do we learn from retrospective events in order to make changes, continue learning, promote adaptive behaviour and coping skills, and provide proactive measures that reduce self-blaming?

The missing ingredients: Reflection and sense-making. Most nurses in this research study described the importance of knowing the patient for who they are; understanding their personal history, their values, family, and their character, as a way to

provide holistic patient care. This most likely is due to an alignment of their values and the organizations values on patient-centered and trauma-informed care. Nurses come to work with every intention of providing the best care possible to their patients; however, taking a punitive and blame approach to oneself in addition to blaming others for their decisions, can be psychologically detrimental to one's own practice and the culture of the unit (Thompson, Aitken, Doran, & Dowding, 2013). Taking the approach of "why couldn't I have noticed that?" does not allow the nurse and their colleagues to make sense of what else could have happened, given the circumstance. Ironically, most nurses interviewed in this study portrayed a sense of situational awareness that was contrary to the literature described in chapter two; yet when hindsight bias takes over, it prevents the ability for them to stop and make sense of 'why' certain decisions were made (Henriksen & Kaplan, 2003; Thompson, Aitken, Doran, & Dowding, 2013). Most nurses interviewed discussed their unit's ability to reflect on certain situations through formal safety huddles or team operational debriefings. These situations have the potential to address and reduce hindsight bias, however this was not apparent in the stories shared. Essentially, making sense of what happened and why it happened, in addition to a gap around reflecting on feelings and any associated distress, is the missing ingredient to their daily practice (Rudolph, Raemer, & Simon, 2014; Turner & Harder, 2018).

One novel and innovative approach that aligns with patient and practice-based learning and aligns with the values represented in this research study is the Person and Practice-based learning Framework, developed by Behavioural Supports Ontario (BSO) (2012), in Partnership with the Alzheimer's Society of Ontario. The essence of the Building Capacity framework is geared towards individuals, programs, and an

organization interested in supporting patient-centred care and ongoing system change for older adults that are at risk for responsive behaviours. It provides a strategy for continuous learning that supports healthcare providers in having the ability to provide exceptional care, incorporates the individual to be accountable for their application of learning, in addition to the team and the organization's accountability in supporting learning and most importantly, reflection, especially if nurses struggle to stay connected to values or philosophies of care (BSO, 2012).

Guidelines that encourage reflection and sense making. As mentioned in chapter two, the literature presented a strong case that suggest many nurses apply physical restraint use for falls prevention, despite a large amount of evidence that indicates they may increase falls and falls-related injuries (Evans, Wood & Lambert 2003; Kopke et al., 2012; Mohler & Meyer, 2014). In 2012 PHC developed an interdisciplinary guideline for unsettled and challenging patient behaviours: least restraint approach. All nurses interviewed in this research study explicitly stated that physical restraints do not reduce falls and many were aware of numerous situations where patients were harmed as a result of physical restraint application for falls prevention. The application and rationale for the least restraint policy is well engrained in the nurses' practice and is part of their patient safety culture. The implementation of this policy created a shift from the belief that restraints are for patient safety, to restraints can cause more harm than good. Nurses think of other strategies to reduce the chance of injury, whilst accepting that risk can be unpredictable in nature. The belief is not to prevent a fall from happening, but more on how to mitigate further harm should a fall occur.

Since 2012, there appears to be a vast range of evidence on the effectiveness of guideline-based and multidisciplinary approaches on minimizing the use of physical restraints in residential care, mental health units, and surgical step-down units, including studies centered around better understanding factors for physical restraint use and their alternatives (Abraham et al., 2015; Enns, Rhemtulla, Ewa, Fruetek, & Holroyd-Leduc, 2014; Ludwick, O'Toole & Meehan, 2012; Purcell, McGlinsey, Beckett, Rudd, & Arbour, 2015). Studies have also pointed out the fact that education in itself is insufficient in changing perceptions and a culture of using physical restraints (De Bellis et al., 2011; Ireland, Kirkpatrick, Boblin, & Robertson, 2012; Leahy-Warren, Varghese, Day, & Curtin, 2018). Rather, the implementation of initiatives such as least restraint policies and falls prevention guidelines should include listening and recognizing a unit's specific expertise and clinical mix. Adding to this, the current culture around falls prevention is that some patients will fall despite all interventions, and the goal should be to prevent or mitigate injury to the patient, rather than preventing falls (Ireland, Kirkpatrick, Boblin, & Robertson, 2012.) This statement needs to be honoured and supported by individual programs and an organization. Nevertheless, injury to patients, whether from a fall or from an unsafe behavior moment can be shocking to all nurses, and although they accept that certain situations can lead to patient injury, they feel the sharp end of the impact (Ireland, Kirkpatrick, Boblin, & Robertson, 2012.)

What stood out in this thesis research study was when some nurses mentioned that once physical restraints were applied, nurses noticed a negative emotional reaction within themselves. Despite a mention by some that the decision to either apply physical restraints or continue with de-escalation techniques was not based on the nurses'

emotional reaction or distress, there is still an emotional piece. Whether they are insightful to this or not requires further understanding. Adding to this, there is a sense of normalization around violence and aggression in the workforce, and regarded as part of the job. With this in mind, why do some nurses attempt to separate their emotions from their decision-making process? Additionally, do we need to provide nurses with a safe space to discuss how decisions and tasks are interrelated with their emotions and that this is in fact, a normal reaction to an abnormal event?

There is an abundance of literature around violence in healthcare (ECRI Institute, 2017; Nikathil, Olaussen, Gocentas, Symons, & Mitra, 2017). Although nurses in this study have violence prevention curriculum and violence prevention advisor support, there is a culture of under-reporting violence and aggression-related events, unless the nurse is severely injured or has time to report. With this in mind, do nurses feel badly reporting that they were injured by a patient due to their perception of the vulnerable state of these patients? Adding a new dilemma to care, nurses want to provide patient centred care, but request training on how to take down a patient or avoid punches. Given that nurses cannot control certain situations, do they view the choice to retreat as a failure to provide quality care? Adding to this, do nurses feel that reporting on someone's actions is essentially abandoning care? With this mind, and in regards to the previous conversation around applying and understanding the philosophy of de-escalation techniques, it may be that some nurses in moments of crisis do not apply all aspects of their PVPV training. For instance, de-escalation techniques are not meant to include force or consequence, particularly when considering a trauma-informed lens or person-centred approach to people living with dementia (HEABC, 2010). Rather, we need to promote rational

thinking during a crisis, especially when we know that the patient is most likely in a fight or flight mode and therefore, may be at risk for harming themselves or others.

Additionally, we need to support nurses by honouring the philosophy of de-escalation techniques, ensuring that nurses are able to reject the notion that backing away from a patient is not akin to abandonment. Essentially, we need to continue moving toward approaches that require staff to use their brains and their hearts more than bodily force to contain potential and actual risk to themselves or others (Skills for Security, 2010; Stubbs & Paterson, 2011).

A philosophical underpinning of these approaches is that safety is not just about patient safety, but it is also about the safety of practitioners (Epstein, Fiscella, Lesser, & Strange, 2010). Safety is not just viewed as avoiding harm or injury, but it also an activity of everyday nursing care. It's being able to come to work and practice in an environment that sets people up for success and progress. Through appreciative inquiry, we need to find many ways of keeping ourselves and others safe, while honouring the patient's values and preferences as much as possible. We also need to promote a culture of psychological safety: that is, staff feel safe speaking up about their experiences and sharing their feelings. If we don't make the effort around this then we will not achieve a vision of patient-centred care (Epstein, Fiscella, Lesser, & Strange, 2010).

Reflect and acknowledge that violence is not normal. According to Pasquini, Pozzi, Save and Sujun (2011) there is widespread criticism of incident reporting on the basis that most systems require voluntary reporting of patient safety events and therefore, do not reflect an accurate representation to the full scope of patient safety events. Barriers related to underreporting range from no tangible actions observed as a result of reporting

such as, lack of management accountability for ensuring follow-up of reported events, a lack of a system-wide support and value for a reporting system, a culture of blame and shame, to a feeling that only serious violent events should be reported into a formal reporting system (Blando, Ridenour, Hartley, & Casteel, 2015; Campbell, Burg, & Gammonley, 2015; Hallett, Huber, Sixsmith & Dickens, 2016; Gifford & Anderson, 2010). Additionally, the notion that violence is regarded as part of the job and is therefore an accepted part of the environment, further contributes to a reduced change of incident reporting, unless a nurse is physically injured (Hogath, Beattie, & Morphet, 2016; Ward, 2013). Adding to this, Stevenson, Jack, O'Mara, and LeGris (2015) describe a deeper understanding to the nurse's experience during physical, emotional and verbal events, and although mentioned that this was part of the job, they struggle with balancing their duty to care to their duty of keeping themselves safe.

Some nurses in this research study reported that they either do not have, or do not want to make the time to report and talk about an event, however each nurse reported that at some stage they would like to share their experience. Sharing one's experience is solely based on one's ability to feel safe and comfortable at work, in order to learn, contribute, and continuously improve their practice (Frazier, Fainshmidt, Klinger, Pezeshkan & Vracheva, 2017). Although debriefing is common practice during and after high-fidelity patient simulation and in-situ simulation, in addition to after a critical incident, nurses within this research study are looking for either a formal or informal process for emotional check-ins, which could eventually lead to a formalised emotional and/or operational debrief (Cant & Cooper, 2011; Couper, Salman, Soar, Finn & Perkins, 2013; Eppich, Mullan, Brett-Fleegler, & Cheng, 2016). Adding to this, some nurses

reported that when they see the strain on their colleague's faces, they may not feel comfortable approaching them and talking about how they are feeling. The organizational culture then influences nurses to continue working, especially when workloads are high and/or they are faced with numerous tasks and documentation to complete. One might also ask whether nurses are aware of their emotions and how they may unintentionally contribute to their decision-making? And, what accountability should nurses have around checking in with their own feelings and managing their response to crisis?

When we think about psychological safety, the notion to just put the event to one side and keeping moving forward can have detrimental effects both personally and professionally and can create a ripple effect of negative outcomes for their co-workers, managers, other patients, and the organization (Roussin, Larraz, Jamieson, & Maestre, 2018). Additionally, the inability to feel safe and ask questions around their feelings of unease in a high-risk patient behaviour unit can also have detrimental effects. For example, compassion fatigue is a well described occupational hazard that describes a cost of caring resulting from one's physical, and emotional exhaustion, with pronounced changes in the worker's ability to provide empathetic care to their patients and co-workers (Mathieu, 2007; Sorenson, Bolick, Wright, & Hamilton, 2016). Ultimately, there is a threat to a thriving resilient culture (Kelly, Runge, & Spencer, 2016). Rather than providing an environment for nurses to thrive in their complicated and variable driven environment, they turn up to survive the shift, follow rules and protocols, and don't have energy to make safe workaround decisions or adapt to unpredictable moments (Hart, Brannan, and De Chesnay, 2014). A lack of resilience can be individual, unit based, and impact the organization and therefore, healthcare organizations need to promote

resiliency so that when a traumatic event or patient safety event occur, staff are able to bounce back to their previous state of highly functioning individuals (Hart, Brannan, and De Chesnay, 2014). Adding to this, we have a mix of nurses that have competing personal values and ways of providing safe care to patients, which sometimes clash during moments of unpredictable unsafe behavior situations. Again, healthcare organizations need to provide an array of supportive measures that promote resiliency for a spectrum of human responses to a crisis, and at the same time, are in line with a value for patient-centered care (BSO, 2012).

Changing the conversation. The root of the problem most likely lies with the current culture, which may require a massive shift of the organizational culture to ensure that safe care aligns with a patient-centered philosophy (BSO, 2012). In addition to the Building Capacity framework (BSO, 2012), the Sanctuary Model uses the trauma-based approach as a philosophical structure and organizational change intervention that facilitates a restorative culture and allows health care members to be emotionally available to one another and their patients, which in turn, create the right conditions for a resilient environment (Esaki et al, 2014). It is grounded in constructivist self-development theory, burnout theory, and systems theory, and seeks to improve an organization's culture by changing the mindset of staff on the effects of trauma and stress on behavior: from regarding people as mentally sick, to being as a result of injury (Esaki et al, 2014). Most nurses interviewed in this study shared the desire to work in an environment that not only embraces adaptability and accepts unpredictability, but also an environment that is emotionally and physically safe for traumatized patients and

themselves. People want to work in a healthy environment that promotes emotional health and well-being for staff, and for the patients to whom they provide care too.

For example, Corbin et al., (2010) applied The Sanctuary Model to develop a trauma-informed intervention framework for an Emergency Department that provides care to patients injured from a violent interaction. The notion that their Emergency Department was a community of safety and healing for those who experienced traumatic injuries such as, gunshot wounds and violence related injuries, also included the notion that those who provide care can also be severely impacted by what they see. If not honoured, their experiences and the impact can lead to their inability to provide safe care, struggle to manage their emotions, and deal with grief and loss. Healing with the patients is the epitome of patient-partnered care: it acknowledges that what patients experience and what care providers experience run parallel together, and a model of patient-centered or patient-partnered care should include providing a safe environment for care providers. Essentially, if care providers do not feel psychologically safe, then they will not achieve safe patient care and thus, not provide patient-centered care (Corbin et al., 2010).

When it comes to implementing The Sanctuary model in acute psychiatric and mental health centres, the literature does present the notion that the approach can lead to increased patient and staff satisfaction, improved treatment outcomes and completed courses of therapy, and a reduction in the use of physical restraints and seclusion (Sweeney, Clement, Filson, & Kennedy, 2016).

Bloom (2010) supports the notion that those who provide care commonly experience stressful events, and will experience at least one traumatic event in their lifetime. Adding to this, care providers are dealing with chronic and daily stressors within

their work environments, in conjunction with the challenges they face in their private lives. Essentially, two types of vulnerable populations (i.e., patients and care providers) interact within a chaotic and complex environment, which not only affects the physical and psychosocial wellbeing of health care providers, but can also put strain on the health organization and the health care system as a whole (Bloom, 2010). With this mind, The Sanctuary Model understands that within the healthcare environment, there is a parallel process to delivering care. That is, a relationship exists between the different organization levels and the people within that environment; a sanctuary for psychological safety acknowledges these relationships and interactions, and are part of a whole system or community. To accomplish this level of ‘sanctuary’ the model promotes authentic leadership, shared values, and commitment to a culture of non-violence, emotional intelligence, social learning, open communication, democracy, social responsibility, and growth and change (Bloom, 2010; Sweeney, Clement, Filson, & Kennedy, 2016). It is important to be aware that while some people may consent to being restrained, others may not. The idea is that the person’s voice guides the decision-making process, even in a crisis. With this in mind, this area should warrant concrete action around incorporating trauma informed care into the education model for nurses, as the approach to patients with trauma is completely different to how we currently approach patients, including the language used when speaking to patients (Bloom, 2010; Sweeney, Clement, Filson, & Kennedy, 2016).

Recommendations

Based on the study findings and what I believe may impact knowledge translation, the following recommendations are based on three specific policy areas: 1) organizational culture, 2) professional practice, and 3) occupational health and safety.

Organizational Culture

1. Incorporate a resilience engineering philosophy into the ‘Organization’s Vision and Value for Patient Safety.’ That is, rather than solely looking for why things go wrong, and how to prevent safety event events from happening, add the following safety lens to our current view to safety: look to make sense of what makes things work well, in light of the unpredictable spectrum of human behaviours in response to uncertain and complicated situations.
2. A practical approach for team development and cohesiveness that supports systems thinking, resilience and improving safety in healthcare, in addition to linking new evidence to develop clinical decision-making that aligns with a vision and value for patient safety is STEW: Systems Thinking for Everyday Work (NHS, 2018). With the notion that safety emerges out of interactions, resilience is essentially how individuals and team relate with one another, in addition to dialogic sensemaking and collaboration (Hollnagel, 2014). Learning together about the different parts of the system and allowing emergence, creativity and flexibility – cornerstones of collaborative work – support system-wide organizational and team learning. These discussion cards frame team conversations and support systematic group discussion and are another tool to improve safe healthcare.

3. Another practical approach for point-of-care-staff that supports a team's resilient performance is applying four essential abilities of resilience to their everyday conversations on safety and risk, for instance, during safety huddles. In this research study, participants described key qualities that support a team's ability to provide safer patient care that is patient-centered and partnered. The ability to link this new evidence to support clinical decision-making requires practical processes to take something that is beyond a structured task approach (such as a falls risk assessment) and bring meaning to its intended purpose. Resilient performance focuses on what teams do, rather than what teams have, thus the following statements can be used in a safety check-in forum and emphasizes a team's ability to provide safe care: (1) the ability to respond, (2) the ability to monitor, (3) the ability to anticipate, and (4) the ability to learn (Hollnagel, 2014). Using this model, teams can recognize when day-to-day work is at the brink of less than expected performance, which can impact the team's ability to find connection amongst one another and decrease their ability to succeed under varying conditions, thus impacting patient safety. Essentially, if a team aims to be a resilient performing team, they must be able to do certain things, which can be expressed using these four abilities (Hollnagel, 2014).
4. With the support of the senior leadership team and the board of directors for the health care organization, implement trauma-informed practice into the organization that aligns with an organization's vision for social justice and equity. The Sanctuary Model and Philosophy is one such model that offers

concrete mechanisms to support change and support organizations in creating safer spaces.

5. Organizations need to take a stand against the normalization of violence and aggression in the workforce, ensuring that nurses are supported and given time to report incidents of actual or intended harm, both physical and emotional. Further, nurses must be supported with the notion that if one chooses to step back from a possibly volatile situation rather than moving towards the patient, it is not a sign of patient abandonment, but rather allows the nurse to control their emotions and critically think, while providing time for the patient to move from fight or flight, and into a calm or logical thinking space.

Professional Practice

1. Although institutional policies provide guidelines for best practice, they should also support the ability for nurses to make sound decisions in light of uncertainty, by communicating timely and accurate information of risk, and have the ability to offer safety ideas. The current policy and guideline development need to move from designing a process, to ensuring the best patient outcomes are achieved, with understanding that numerous processes may all lead to the same outcome. Such policies and guidelines embrace adaptability and safe workarounds in order to manage and flex with unpredictable moments in healthcare. Nurses in this research study exemplified the strength of dynamic risk assessments and their ability to adapt and flex in times of uncertainty in order to provide safer patient care. A Monarch moment happens when nurses have the ability to take new

knowledge that is evidence based and use it to improve an existing process, but more importantly, become hardwired with a value for continuously improving and enhancing the patient experience, clinical outcomes and organizational capacity (Sanares-Carreon & Heliker, (2016). Principles-based policies can link new evidence to everyday work by providing general, broadly stated norms or a framework in which nurses can then organize their own internal system and processes in order to achieve some level of control and achieve the intended outcome. Essentially, a principle-based approach to policy and guideline development support flexible decision-making and interpretation in the context in which a guideline or policy is used (Sanares-Carreon & Heliker, (2016).

2. As previously mentioned, resilience is key in allowing nurses to thrive, rather than survive. Resilience workshops such as those mentioned by Hart, Brannan, & De Chesnay (2014) should be incorporated as part of the professional practice curriculum and regarded as continuous professional development. Resilience should be more than a personal trait: it should be an organizational strategy and professional expectation. At the same time, and although an organization should support a nurse's decision to report violent and aggressive events, in addition to stepping away from a volatile situation, nurses need to take accountability to how they manage their feelings during a crisis by acknowledging that they also may be in a fight or flight mode. Part of the resilience training could incorporate

accountability for professional and personal decision-making processes (Hart, Brannan, & De Chesnay, 2014).

3. Incorporate education around hindsight bias, appreciative inquiry, and adaptive learning into team debriefings or safety huddles. The use of in-situ simulation of real cases has also been shown to be an effective way of reducing hindsight bias and allowing learning through sense-making (Henriksen & Kaplan, 2003).
4. As previously mentioned, we appear to increasingly be caring for a population of people living with cognitive decline or associated dementias, and people living with mental health issues; with a diversity of functional abilities from older and frail, to young and strong, but at risk for frailty. Additionally, we are caring for these populations in in-patient acute care settings, to residential and geriatric-acute care. Regardless of their clinical and medical presentation, we ought to approach all with a similar approach to emotional connection and purposeful engagement. Behavioural care plans such as those supported by the P.I.E.C.E.S. literature emphasize the necessity of patient-partnered care and assessment strategies that incorporate the dynamic nature of risk (P.I.E.C.E.S. 2012).

Occupational Health and Safety

1. Incorporate PVPC into unit-based simulations that may address the issue around nurses feeling that their current de-escalation skills do not match the actual patients under their care. If what is taught in theory is then practiced in a simulation setting and applied to patient cases, knowledge

may then be translated and allow nurses to realise that PVPC guidelines do provide the fundamentals for behavioural management for all patients.

Although nurses appear to be aware of behaviour-specific curriculum such as PVPC and P.I.E.C.E.S. it would be interesting to see if what is taught in theory is applied to a crisis situation, and if not, what parts are and are not applied, and the rationale for these decisions.

2. Provide a formal process on how to emotionally support staff members after a crisis, which will cater to the spectrum of human response. For instance, The Scott Three-Tiered Interventional Model of Second Victim Support is a 'peer to peer' intervention support model that builds on group emotional debriefings after a crisis, in addition to rapid referral for further debriefing and event investigation (Scott et al., 2010).
3. Additionally, if people are seeking support and require leave following a crisis, Human Resources needs to support that psychosocial wellbeing is just as paramount as physical wellbeing, and therefore should not judge providers directly or indirectly for making this choice. Additionally, compassion fatigue and other related concepts (e.g., burnout, post-traumatic stress disorder) require acknowledgement and recognition by leaders as potentially having long-term impact to care providers.
4. Patient safety and staff safety philosophies should be aligned with the notion that they are not mutually exclusive. Additionally, if staff feel safe and are happy to be at work, patient safety and patient-centred care is more likely to be seamless in its fulfillment.

Study Limitations

It is important to note the potential limitations of this study. First, a limitation of this study was that the experiences of other personnel (i.e., LPNs, Care Aides, physicians) who are involved in direct patient care and patient restraint situations were not included, and therefore, this study may not represent the complete picture of the decision-making process around restraint use. Second, the sample for the individual interviews in the first phase of the study represented a single program within the organization, and seemed to have a relatively well-established plan in place for decision-making and consistent use and updating of patient care plans. It is difficult to determine whether similar findings would have been elicited in practice environments with there are more diverse practitioner values, or inconsistent use of patient care planning. Similarly, an additional limitation of this study is that in the second phase of data collection (focus group), all participants represented one unit within a facility. Although variation between participants' experiences were noted, the commonality of their practice may have encouraged homogeneous viewpoints during the focus group discussion. A final limitation is the importance of acknowledging the student researcher's position as a Leader in Patient Safety for the health organization, which may have the potential to lead to researcher bias in the analysis or impact on the participants' reflections during the individual or focus group interview(s).

Future Research

Based on review of the literature and the study findings, further qualitative and quantitative research is necessary that focuses on patient and family's experiences with conversations around fall and injury prevention, in light of health care providers

attempting to balance the sense of agency of their patients. Using qualitative methods, it would be worth studying if and why nurses struggle to have conversations with family and patients, in relation to the risk of injury during a hospital admission. It would also be worthwhile to replicate this study to allow for the inclusion of more diverse samples of personnel (e.g., LPNs, physicians) who may also impact the decision-making process within these settings.

What appears to be missing in the literature is comprehensive information on the barriers to knowledge translation, specific to approaches such as PVPC, P.I.E.C.E.S. and trauma informed practice. With this in mind, future research should focus on questions related to nurses' perceptions of patient abandonment. For instance, do nurses feel that if they step away from a situation and avoid hands-on care, this creates a feeling of abandoning their patient? And, what impact does this have on them personally and professionally? Additionally, does the knowledge-to-action framework as a guideline contribute to increased knowledge translation with the implementation of a patient-centred care approach? It would be interesting to see if what is taught in theory is applied to a crisis situation, and if not, what parts are and are not applied, and the rationale for these decisions. Action research could help provide reflection and group problem solving with regards to questions around decision-making during a crisis, which could be tested in a simulation setting. Studies examining the introduction of educational or supportive interventions would also help to determine if there are measurable differences in practice, compared to before being utilized. For example, one intervention study could examine whether routine simulation training using PVPC de-escalation techniques increases a nurse's confidence and/or competence in applying PVPC techniques to all patient

populations. When it comes to promoting nurse resilience and focusing on organizational outcomes, it is important to testing the impact of various forms of formal and informal debriefing following a crisis. For example, an intervention study could focus on evaluating the introduction of the ‘peer to peer’ Second Victim program within a particular setting, which would provide evidence of whether they actually impact personal and/or organizational outcomes (e.g., staff satisfaction, psychological safety, perceived stress, use of sick time, and/or staff turnover).

CHAPTER SIX: CONCLUSIONS

The illustrated diagram, a balancing act: Factors that influence a sense of agency with unsafe patient behavior describes the following: The goal for nurses is to promote patients with a sense of agency, especially during moments of unpredictable and predictable unsafe patient behaviour moments. A competing or complementary factor is the management and avoidance of unsafe patient behaviour situations. Nurses do not look to physical restraint use as an effective way to prevent falls or manage unsafe behaviours or impulsive movements, and would rather rely on de-escalation techniques in addition to understanding cues and triggers that either prompt the need to intervene, or continue monitoring, alongside understanding the root cause to their response, in order to prevent the slide into physical restraint use territory.

Although the goal for patient care is for nurses to support patients with maintaining a sense of agency, the decision-making process is complicated, dynamic, and counter balanced with maintaining a safe environment and mitigating the chance of unsafe patient behaviours. The heart of this balance is a value and a culture of patient-centered and patient-partnered care, with the acceptance that certain risk comes with promoting a patient's sense of agency. Despite this, the emotional struggle to balance a sense of agency and reduce the chance of patient harm or staff harm is apparent, especially given the fact that in today's healthcare setting we are caring for young and strong individuals that present with complex chronic disease such as, neurocognitive disorders and/or mental health disorders associated with behavioural changes, similar to what we see in older adults and frail populations.

Although nurses are provided with exceptional models of care such as PVPC and P.I.E.C.E.S amongst other frameworks, the ability to link theory into practice, especially during a moment of heightened emotions, appears to be an ongoing struggle. These models appear to be regarded as cookie-cutter guidelines, and only applicable to a certain type of patient population: old and frail. Rather, these models of care have the potential to be regarded as the basic fundamentals of care that allow nurses to apply their critical thinking skills and observations from situational awareness, to customise and individualise how care is to be provided, in addition to formulating care with the patient.

Adding to this and when a crisis occurs, or when nurses reflect on whether things could have been done differently, organizations need to set a precedence for teams to take a time-out and reflect. Not only can this address the desire for nurses to talk about their feelings and move from an emotional state of being, to a rational state of thinking, but also promote a learning and psychologically safe culture, which are all essential to a safe environment and safe patient care. Violence is not a normal part of healthcare: emotional reactions to an abnormal situation are normal. Although nurses provide care and compassion, they too need to be cared for with compassion by not only their co-workers and unit leaders, but the organization. If health care organizations truly value occupational health and safety and staff mental health and wellness, they need to explicitly acknowledge that the current working conditions are difficult, stressful, and can create negative personal and professional impact to nurses. Not only are nurses' responsible for maintaining their physical, psychological, and emotional fitness to practice, organizations must implement robust resilience training and initiatives that support a nurse's ability to meet Professional Standards, provide safe patient care, and

want to partner with patients and families to align with an organization's value for patient-centered care.

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Appendix A

SEEKING RN PARTICIPANTS FOR STUDY ON *PHYSICAL RESTRAINT USE FOR FALLS PREVENTION*

We are looking for RN volunteers to take part in a study on *how nurses balance risk with patient autonomy when making decisions about physical restraint use with older adults in acute care.*

As a participant in this study, you would be asked to participate in an individual interview, or a focus group interview. You can also choose to participate in both.

Your participation would involve 1 individual interview session, and/or 1 focus group session, each of which would last approximately 1-1.5 hours.

In appreciation for your time during the individual interview, you will receive a *Starbucks Coffee Voucher*. Light refreshments will be provided during the focus group.

For more information about this study,
please contact:

***Sarah Carriere (MN Student) at
778.997.6685 or Email:***

scarriere@providencehealth.bc.ca

Researcher: Sarah Carriere.

Hospital Affiliation: Patient Safety, Providence Health Care

This Master's thesis research is being supervised by Dr. Kelly Penz, PhD,
RN

Phone: 306.337.3812. Email: Kelly.penz@usask.ca
College of Nursing, University of Saskatchewan

Appendix B

Screening Process

If an RN shows interest in participating, the following screening question will be asked:

“What is your experience with physical restraint use?”

If a RN either suggests an imbalance or balance between risk and patient autonomy, regardless of using or not using physical restraints in falls prevention, we will invite theme to participate in either the interview and/or the focus group.

Appendix C



Individual Interview Consent Form

You are invited to participate in a research study entitled:

How Nurses Balance Risk with Patient Autonomy When Making Decisions About Physical Restraint Use with Older Patients in Acute Care

Please read this form carefully, and feel free to contact us with any questions.

Researcher:

Sarah Ann Carriere, RN, Graduate Student

College of Nursing, University of Saskatchewan

Telephone: 778-997-6685. Email: slc199@mail.usask.ca

Supervisor:

Dr. Kelly Penz, PhD, RN

Assistant Professor

College of Nursing, University of Saskatchewan (Regina Campus)

Phone: 306-337-3812 Email: kelly.penz@usask.ca

The Purpose of the Research:

The purpose of this research is to better understand how RNs balance risk and patient autonomy in the decision-making process for physical restraint use in order to reduce the fall risk for older adult patients in acute care settings. What I am interested in at this time are any stories you have to tell and how they affect you personally, and your nursing practice. I would like to further understand your decision-making process when balancing risk and patient autonomy for physical restraint use. I would also like to share information about the complexity of RNs' decision-making process when choosing to apply physical restraints for falls prevention.

Research Procedure:

In order to develop a deeper understanding on this decision-making process, we are asking for you to share your stories and experiences by participating in one individual interview. We anticipate approximately 8 individuals will be included in this study. Please feel free to ask any questions regarding the procedures and goals of the study, or your role.

Individual Interview Procedure

The aim of conducting individual interviews is to generate new knowledge about individual experiences about each RNs' unique experiences and values that contribute to your overall decision-making process for physical restraint use. The type of questions we will ask include broad questions on topics such as, risk, patient autonomy, and how you may either struggle or not with finding a balance between these topics when caring for

the older adult population in your unit. You will be provided a list of the type of questions you may be asked. There might be moments during the interview in which the researcher may go off script and ask different questions, as you may have shared an experience that the researcher may not have anticipated to be shared. The interview will be audio recorded so that the facilitator can fully engage in the conversation. The interview will take approximately 1 – 1.5 hours of your time.

Potential Risks:

Some of the questions you are asked may be difficult to answer or cause a strong emotional reaction. You may choose not to answer these questions and only answer those questions that you are comfortable with. If you do choose to answer these questions and unexpectedly react to them with strong emotions, we would encourage you to talk with people in your life that have meaning to you. As well, information on the arrangement and availability of counseling services located within your program will be offered to you, and with no fee. At the end of this interview we invite you to reflect on what may have been discussed and also encourage you to debrief on any particulars in the conversation that caught your attention.

Potential Benefits:

Taking part in this study may or may not benefit you directly. However, we believe that your feedback is very important. The information learned from this study may provide further understanding to what is already known, to further understand any gaps that might exist, and develop a deeper understanding on any commonalities and variations in the decision-making processes that nurses may face with risk and patient autonomy.

Compensation:

As a token of our appreciation each participant will receive a \$10 Starbucks coffee card. This will be provided to you at the beginning of your individual interview.

Confidentiality:

Participation in this study is voluntary and you are free to withdraw from the interview at any time. Although the data from this research project will be published and presented at conferences, the data will be reported anonymously and in a summarized form, so no one can identify you. Only the researchers will have access to confidential information such as your phone number or email address. The information collected from the individual interview will then be used analyzed and then shared to participants at the follow-up focus group, with the aim to provide an opportunity of reflection. Once the data is collected the list that stored confidential information will be shredded and deleted from any electronic record.

Storage of Data/Dissemination:

Only your first name will be identified on the data synthesis. Alternatively, you have the choice to use a pseudonym in place of your name. Your specific care unit or hospital location will not be identified. All data will be stored in a locked drawer at the College of Nursing, University of Saskatchewan for five years. Any identifying information will be stored separately from the data collected. Only the research team will be able to look at

the information. When the data is no longer required, the research team will archive it as an electronically encrypted file.

Right to Withdraw:

We value your participation in this study, but it is important to note that your participation is completely voluntary. You can answer only those questions that you are comfortable with and you can withdraw at any time with no consequences. If you chose to withdraw we may find it difficult to remove your experiences from the recorded audio-files. However, we will anonymize the data so that your experiences cannot be identified as you.

Follow up:

To obtain results or a summary from the study, please feel free to contact Sarah Carriere using the contact information provided on page one.

Questions or Concerns:

If you require additional information and further explanation of this study, please feel free to contact Sarah Carriere using the information provided at the top of page one. This research project has been approved on ethical grounds by the University of Saskatchewan Behavioral Research Ethics Board and the University of BC Research Ethics Board at Providence Health Care. Any questions regarding your rights as a participant may be addressed to that committee through the Research Ethics Office ethics.office@usask.ca (306) 966-2975. Out-of-town participants may call toll-free (888) 966-2975.

Consent to Participate:

I have read and I understand the description provided above; I have been provided with an opportunity to ask questions and my questions have been answered satisfactorily. I consent to participate in the study described above, understanding that I may withdraw this consent at any time. A copy of this consent form has been given to me for my records.

(Name of Participant)

(Date)

(Signature of Participant)

(Signature of Researcher)

A copy of this consent will be left with you, and a copy will be taken by the researcher.

Appendix D



Focus Group Consent Form

You are invited to participate in a research study entitled:

How Nurses Balance Risk with Patient Autonomy When Making Decisions About Physical Restraint Use with Older Patients in Acute Care

Please read this form carefully, and feel free to contact us with any questions.

Researcher:

Sarah Ann Carriere, RN, Graduate Student

College of Nursing, University of Saskatchewan

Telephone: 778-997-6685. Email: slc199@mail.usask.ca

Supervisor:

Dr. Kelly Penz, PhD, RN

Assistant Professor

College of Nursing, University of Saskatchewan (Regina Campus)

Phone: 306-337-3812 Email: kelly.penz@usask.ca

The Purpose of the Research:

The purpose of this research is to better understand how RNs balance risk and patient autonomy in the decision-making process for physical restraint use in order to reduce the fall risk for older adult patients in acute care settings. What I am interested in at this time are any stories you have to tell and how they affect you personally, and your nursing practice. I would like to further understand your decision-making process when balancing risk and patient autonomy for physical restraint use. I would also like to share information about the complexity of RNs' decision-making process when choosing to apply physical restraints for falls prevention.

Research Procedure:

In order to develop a deeper understanding on this decision-making process, we are asking for you to share your stories and experiences by participating in one focus group interview. We anticipate approximately 6 individuals will be included in this study.

Please feel free to ask any questions regarding the procedures and goals of the study, or your role.

Focus Group Procedure

The aim of conducting focus group interviews is to generate new knowledge in a group format about each RNs' experiences and values that contribute to your overall decision-making process for physical restraint use. We would like to see what type of conversation, thoughts, and feelings are generated from a group interaction. We anticipate a maximum of 6 people in the focus group and a trained qualitative researcher

that specializes in focus groups will facilitate them. The type of questions we will ask include broad questions on topics such as, risk, patient autonomy, and how you may either struggle or not with finding a balance between these topics when caring for the older adult population in your unit. The focus group will be audio recorded so that the facilitator can fully engage in the conversation. Sometimes when focus groups are recorded, it can be difficult to determine the different voices. The researcher will be in the room to track the conversation and identify who says what, by marking only their first name. At times, the researcher may interject the conversation with questions, in order to gain a deeper understanding to what may have been discussed. The focus group interview will take approximately 1 – 1.5 hours of your time. Snacks and light refreshments will be provided for you at the focus group interview.

Potential Risks:

Some of the questions you are asked may be difficult to answer or cause a strong emotional reaction. You may choose not to answer these questions and only answer those questions that you are comfortable with. If you do choose to answer these questions and unexpectedly react to them with strong emotions, we would encourage you to talk with people in your life that have meaning to you. As well, information on the arrangement and availability of counseling services located within your program will be offered to you, and with no fee. At the end the focus group, the researcher will allow time for reflection on what may have been discussed, as well as encourage the participants to debrief on any particulars in the conversation that caught their attention.

Potential Benefits:

Taking part in this study may or may not benefit you directly. However, we believe that your feedback is very important. The information learned from this study may provide further understanding to what is already known, to further understand any gaps that might exist, and develop a deeper understanding on any commonalities and variations in the decision-making processes that nurses may face with risk and patient autonomy.

Confidentiality:

Participation in this study is voluntary and you are free to withdraw from the focus group interview at any time. Although the data from this research project will be published and presented at conferences, the data will be reported anonymously and in a summarized form, so no one can identify you. Only the researchers will have access to confidential information such as your phone number or email address. Once the data is collected this list will be shredded and deleted from any electronic record.

Storage of Data/Dissemination:

Only your first name will be identified on the data synthesis. Alternatively, you have the choice to use a pseudonym in place of your name. Your specific care unit or hospital location will not be identified. All data will be stored in a locked drawer at the College of Nursing, University of Saskatchewan for five years. Any identifying information will be stored separately from the data collected. Only the research team will be able to look at the information. When the data is no longer required, the research team will archive it as an electronically encrypted file.

Right to Withdraw:

We value your participation in this study, but it is important to note that your participation is completely voluntary. You can answer only those questions that you are comfortable with and you can withdraw at any time with no consequences. If you chose to withdraw we may find it difficult to remove your experiences from the recorded audio-files. However, we will anonymize the data so that your experiences cannot be identified as you.

Follow up:

To obtain results or a summary from the study, please feel free to contact Sarah Carriere using the contact information provided on page one.

Questions or Concerns:

If you require additional information and further explanation of this study, please feel free to contact Sarah Carriere using the information provided at the top of page one. This research project has been approved on ethical grounds by the University of Saskatchewan Behavioral Research Ethics Board and the University of BC Research Ethics Board at Providence Health Care. Any questions regarding your rights as a participant may be addressed to that committee through the Research Ethics Office ethics.office@usask.ca (306) 966-2975. Out-of-town participants may call toll-free (888) 966-2975.

Consent to Participate:

I have read and I understand the description provided above; I have been provided with an opportunity to ask questions and my questions have been answered satisfactorily. I consent to participate in the study described above, understanding that I may withdraw this consent at any time. A copy of this consent form has been given to me for my records.

(Name of Participant)

(Date)

(Signature of Participant)

(Signature of Researcher)

A copy of this consent will be left with you, and a copy will be taken by the researcher.

Appendix E

How Nurses Balance Risk with Patient Autonomy When Making Decisions About Physical Restraint Use with Older Patients in Acute Care.

Name: [Click here to enter text.](#)

Date: [Click here to enter a date.](#)

1) Work Setting - Program:

Mental Health ☐

Elder Care - Acute ☐

Elder Care - Residential ☐

Urban Health ☐

Acute Medical Unit ☐

Acute Surgical Unit ☐

Heart Centre – acute inpatient units ☐

Other: (please state) _____

2) Current nursing position (please specify): [Click here to enter text.](#)

3) How many years have you been licensed to practice as an RN: [enter text.\(yrs\)](#)

4) Educational Background (please check all that apply):

Diploma in Nursing..... ☐

Bachelor's Degree in Nursing..... ☐

Master's Degree in Nursing..... ☐

Doctoral Degree in Nursing..... ☐

Bachelor's Degree in another field..... ☐

Master's Degree in another field ☐

Doctoral Degree in another field..... ☐

Advanced Nurse Specialist/

Licensed Nurse Practitioner..... ☐

5) Total years of Post-Secondary Education: [Click here to enter text.\(yrs\)](#)

6) Year of Birth: [Click here to enter text.\(yr\)](#)

7) Gender: Male ☐ Female ☐

Appendix F

The purpose of this interview is to better understand how nurses balance risk and patient autonomy in the decision-making process for physical restraint use, in order to reduce the fall risk for older adult patients in acute care settings. What I am interested in at this time are any experiences you have to tell and how they affect you personally, and your nursing practice. There are no right or wrong answers, as you are only sharing your everyday experiences. Some of these questions may make you feel sad, angry or uncomfortable. Please know that your feelings are part of your experience and I welcome you to openly share what you are currently experiencing.

Prior to the interview, informed consent would have been completed. Anything that you discuss will be treated with uttermost confidentiality; you also have the right to refuse to answer any questions that you may feel uncomfortable with. Further, you also have the right to ask any questions about any concerns you may have in regards to the interview process. At the end of this interview I invite you to reflect on what may have been discussed and also encourage you to debrief on any particulars in the conversation that caught your attention. Once all the individual interviews are completed, the researchers will conduct a preliminary data analysis. This will then be used to guide questions and specific key topics for a focus group. You may wish to participate in this as well. Lastly, I request that you not share any details of our discussion with your work colleagues, as sharing our conversation could unintentionally bring bias.

The interview guide will consist of a standardized set of questions with key topics:

- Physical restraint use for falls prevention
- Patient safety and what decisions are based on
- How nurses balance risk and autonomy

Individual Interview questions:

1. Can you share an experience of when you decided to use physical restraints?

Prompts:

- What happened?
- Who was involved?
- How did you feel?
- What impact did this have on your future decision-making processes for similar experiences?

2. What are the things that you consider in your decision-making process?

Prompts:

- How do you balance risk of falls/injury with your patient's independence or autonomy when making decisions about the use of physical restraints?
- How do you provide safe care for patients at risk of falling?

- Is there a particular experience that you can share with me?
- What happened?
- Who was involved?
- What factors in your environment contribute to your decisions?
- Is there anything else you would like to talk about that we have not yet discussed?

Appendix G



How you want to be treated.



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SASKATCHEWAN

usask.ca



THE UNIVERSITY
OF BRITISH COLUMBIA

The purpose of this focus group is to better understand how nurses balance risk and patient autonomy in the decision-making process for physical restraint use, in order to reduce the fall risk for older adult patients in acute care settings. Prior to the focus group, I conducted individual interviews that sought to better understand our research question. I then conducted a preliminary data analysis to see if any particular themes stood out. I would like to share these themes with the focus group and further explore these themes. What I am also interested in at this time are any experiences you have to tell and how they affect you personally, and your nursing practice. There are no right or wrong answers, as you are only sharing your everyday experiences. Some of these questions may make you feel sad, angry or uncomfortable. Please know that your feelings are part of your experience and I welcome you to openly share what you are currently experiencing.

Prior to this focus group, informed consent would have been completed. Anything that you discuss will be treated with uttermost confidentiality; you also have the right to refuse to answer any questions that you may feel uncomfortable with. Further, you also have the right to ask any questions about any concerns you may have in regards to the focus group process. At the end of this focus group I invite you to reflect on what may have been discussed and also encourage you to debrief on any particulars in the conversation that caught your attention. Lastly, I request that you not share any details of our discussion with your work colleagues, as sharing our conversation could unintentionally bring bias.

The interview guide will consist of a standardized set of questions with key topics:

- Physical restraint use for falls prevention
- Patient safety and what decisions are based on
- How nurses balance risk and autonomy

The following is an outline of preliminary questions that may be posed to the group:

- How do you know that your risk assessment is correct?
- What challenges do you face when making an assessment around balancing risk and patient autonomy?
- Does experience of the RN determine the level of risk to take with a patient walking the halls?

- Do you feel fatigued or burnt out from constantly de-escalating patients?
- Does the unpredictable aspect of caring for patients challenge your workload?
- How important is the relationship between you and the patient, especially around promoting patient autonomy, for such a vulnerable population?
- What dilemmas do you face with dealing with a challenging patient population?
- How do you cope with knowing that your patients may fall and injure themselves?
- How do you cope with knowing that you've put in all falls' prevention interventions but yet, they still may fall?
- Why do the patients that fall stick with you more than those who you prevent from falling?
- Are you more worried about patients harming others than patient's falling?
- How do you cope with feeling terrible when applying physical restraints?
- What happens when one person on the team disagrees with a plan?
- Once in restraints, how does this impact your workload? Is it more convenient for your workflow?
- Have you ever felt frustrated and wanted to resort to restraints?
- Do you consider patient autonomy when caring for the patient and trying to also manage your workflow?
- When using restraints for behavioral rather than functional issues, does this justify a quicker response to using them?
- How do you determine the safest type of restraint to use?

Appendix H



UNIVERSITY OF
SASKATCHEWAN

Behavioural Research Ethics Board

Certificate of Approval

PRINCIPAL INVESTIGATOR
Kelly Penz

DEPARTMENT
Nursing

BEH#
17-99

INSTITUTION(S) WHERE RESEARCH WILL BE CONDUCTED
St. Paul's Hospital

Mount Saint Joseph's

Youville Residence

STUDENT RESEARCHER(S): Sarah Carriere

FUNDER(S): UNFUNDED

TITLE: How Nurses Balance Risk with Patient Autonomy When Making Decisions about Physical Restraint Use with Older Patients in Acute Care

ORIGINAL REVIEW DATE
31-Mar-2017

APPROVAL ON
10-Apr-2017

APPROVAL OF:
Application for Behavioural Research Ethics Review
Recruitment Poster and email
Participant Consent Form – Interview
Participant Consent Form – Focus Group
Interview and Focus Group Guide
Screening Process
Demographic Form

EXPIRY DATE
09-Apr-2018


Full Board Meeting ☐

Delegated Review ☒

CERTIFICATION: The University of Saskatchewan Behavioural Research Ethics Board (Beh-REB) is constituted and operates in accordance with the current version of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2 2014). The University of Saskatchewan Behavioural Research Ethics Board has reviewed the above-named research project. The proposal was found to be acceptable on ethical grounds. The principal investigator has the responsibility for any other administrative or regulatory approvals that may pertain to this research project, and for ensuring that the authorized research is carried out according to the conditions outlined in the original protocol submitted for ethics review. This Certificate of Approval is valid for the above time period provided there is no change in experimental protocol or consent process or documents.

Any significant changes to your proposed method, or your consent and recruitment procedures should be reported to the Chair for Research Ethics Board consideration in advance of its implementation.

ONGOING REVIEW REQUIREMENTS: In order to receive annual renewal, a status report must be submitted to the REB Chair for Board consideration within one month prior to the current expiry date each year the study remains open, and upon study completion. Please refer to the following website for further instructions:
<http://research.usask.ca/for-researchers/ethics/index.php>


Vivian Ramsden, Chair
University of Saskatchewan
Behavioural Research Ethics Board

Please send all correspondence to:

Research Ethics Office
University of Saskatchewan
Box 5000 RPO University, 223-110 Science Place
Saskatoon SK S7N 5C9
Telephone: (306) 966-2975 Fax: (306) 966-2069

Appendix I



PROVIDENCE HEALTH CARE
Research Institute

UBC-Providence Health Care
Research Institute
Office of Research Services
10th Floor Hornby Site - SPH
c/o 1081 Burrard St.
Vancouver, BC V6Z 1Y6
Tel: (604) 806-8567 Fax: (604)
806-8568

Providence Health Care Institutional Certificate of Final Approval

PRINCIPAL INVESTIGATOR: Sarah Carriere	DEPARTMENT: PHCRI/PHC	UBC REB NUMBER: H17-00434
SPONSORING AGENCIES: N/A		
PROJECT TITLE: How Nurses Balance Risk with Patient Autonomy When Making Decisions about Physical Restraint Use with Older Patients in Acute Care		
Ethics Certificate Released: April 24, 2017		
<p style="text-align: center;">PHC Institutional Approval Date: April 24, 2017</p> <p>The UBC-PHC Research Ethics Board granted ethical approval for the above-referenced research project on the date stated above. All necessary hospital department/facilities approvals and institutional agreements/contracts are now in place and you have permission to begin your research. *</p> <p style="text-align: center;">Dr. S. F. Paul Man VP Research & Academic Affairs, Providence Health Care President, PHC Research Institute</p>		

* PHC Health Information Management requires a copy of this certificate prior to granting access to records.

St. Paul's Hospital
Holy Family Hospital
Mount St. Joseph's Hospital
St. Vincent's Hospital-Brock Fahrni Pavilion
St. Vincent's Hospital-Langara
Youville Residence

Appendix J

	Dec	Jan '17	Feb	Mar- June	Jul	Aug	Sept	Oct	Nov
Thesis proposal defense		■ ■ ■ ■							
Research committee planning	***	***	***	***	***	***	***	***	***
Commence ethics application and submit for review		***	***						
Obtain ethics approval from University of Saskatchewan and UBC		***	***	***					
Nurse recruitment via advertising fliers				***	***				
Data collection – individual Interviews and Focus Group Interview				***	***				
Data analysis					***	***	***	***	
Thesis writing			****	****		***	***	***	***
Timeline for 2018									
	Jan '18	Feb	Mar- June	July	Aug	June	July- Aug	Sept	
Thesis review with supervisor	***	***	***						
Thesis review with committee			***	***					
External reviewer request			***	***					
Thesis defense								***	

Appendix K

Item	Information	Cost-approximate
Qualitative research assistance from the Centre for Health Evaluation and Outcomes Sciences (CHEOS)	<ul style="list-style-type: none"> ▪ Support in conducting one focus groups interviews: ▪ Support with verbatim transcription 	<p>Transcriptionist hourly rate: \$50 8 interviews – approx. 3 three hours spent to transcribe = \$150 x 8 interviews</p> <p>Total = \$1200</p> <p>Transcriptionist use for focus group interview data: = \$300 for 6 hours TOTAL - \$1500</p>
Dragons speak software for mac	Cost for downloading the system to computer	\$ 300
Printing of consent forms and posters		\$ 50.00
Starbuck coffee card vouchers	\$10 per individual	\$80
Light refreshments and snacks for focus group		\$50
TOTAL		\$1980.00